

*PhCfPSPsPIPsC- C,,C-P·PëPePs-C...C-PjC-C†PSC- PIP»P°CfC,PëPIPsCfC,C-:*  
PSPµPiCḡPsP·PsCḡC-, C,PIPµCḡPrC- P¶PµP»P°C,PëPSPsPIC- PeP°PiCfCfP»Pë P±C-P»PsPiPs  
P°P±Ps PjP°PNḡP¶Pµ P±C-P»PsPiPs PePsP»ChPsCḡCf, CḡPeC- PjC-CfC,CḡC,Ch PsPrPSCf  
C,P°P±P»PµC,PeCf P°C†PµC,PëP»CfP°P»C-C†PëP»PsPIPsC— PePëCfP»PsC,Pë, PIPeCḡPëC,Cf  
PiP»C-PIPePsPIPsCḡ PsP±PsP»PsPSPePsCḡ, P±C-P»PsPiPs P°P±Ps PjP°PNḡP¶Pµ P±C-P»PsPiPs  
PePsP»ChPsCḡCf C,P° PrPIC- C,P°P±P»PµC,PePë PeP»PsPiC-PrPsPiCḡPµP»Cḡ, PIPeCḡPëC,C-  
PiP»C-PIPePsPIPsCḡ PsP±PsP»PsPSPePsCḡ, P¶PsPIC,Ps-PePsCḡPëC†PSPµPIPsPiPs

PePsP»CHPsCTjCf.

**PaP°CTjPjP°PePsC,PμCTjP°PiPμPIC,PēC±PSP° PiCTjCfPiP°.**

PjPSC,PēC,CTjPsPjP±PsC,PēC±PSC- P·P°CfPsP±Pē. P†PSPiC-P±C-C,PSCjPē  
P°PiCTjPμPiP°C†C-C— C,CTjPsPjP±PsC†PēC,C-PI, P·P° PIPēPSCjC,PēPsPj  
PiPμPiP°CTjPēPSCf. PjPsPjP±C-PSP°C†C-C—. PjPsP† PjPjP† B01A C30.

**PaP°CTjPjP°PePsP»PsPiiC±PSi PIP»P°CfC,PēPIPsCfC,C-.**

*PaP°CTjPjP°PePsP†PēPSP°PjC-PeP°.*

PjPμC...P°PSC-P·Pj P†C-C—

PjP»PsP†C-P†PsPiCTjPμP»CH PSP°P»PμP¶PēC,CH P†Ps PiCTjPsP»C-PeC-PI, PsP†PēPS P·  
PNēPsPiPs PjPμC,P°P±PsP»C-C,C-PI C" C-PSPiC-P±C-C,PSCjPsPj P°PiCTjPμPiP°C†C-C—  
C,CTjPsPjP±PsC†PēC,C-PI. P"»Cj C†C,PIPsCTjPμPSPSCj P°PeC,PēPIPsPsPiPs  
PjPμC,P°P±PsP»C-C,C†, CjPePēPNē C-PSPiC-P±C†C" P°PiCTjPμPiP°C†C-C†  
C,CTjPsPjP±PsC†PēC,C-PI, PiPsPIPēPSPμPS PIC-P†P±C†C,PēC†Cj PjPμC,P°P±PsP»C-P·Pj  
PeP»PsP†C-P†PsPiCTjPμP»C† P·P° P†PsPiPsPjPsPiPsC† C„PμCTjPjPμPSC,C-PI C†PēC†C,PμPjPē  
C†PēC,PsC...CTjPsPjC† CYP450. PjPeC,PēPIPsPēPNē PjPμC,P°P±PsP»C-C,  
PeP»PsP†C-P†PsPiCTjPμP»C† C†PμP»PμPeC,PēPIPsPs C-PSPiC-P±C†C"  
P·PIBj™ CjP·C†PIP°PSPSCj P°P†PμPSPsP·PēPSP†PēC„PSC†C„P°C,C† (PjP"Pa) P·  
CTjPμC†PμPiC,PSCjPsPj P 2Y<sub>12</sub> PSP° PiPsPIPμCTjC...PSC- C,CTjPsPjP±PsC†PēC,C† C,P°  
PiPsP†P°P»CHC€C† P°PeC,PēPIP°C†C-C† PePsPjPiP»PμPeC†C† PiP»C-PePsPiCTjPsC,PμC—PSC†  
P†P†b/P†P†P†P° PiC-P† P†C-C"† PjP"Pa, P·P°PIP†CjPePē C±PsPjC†  
PiCTjPēPiPSC-C†C†C"†,CHC†Cj P°PiCTjPμPiP°C†C-Cj C,CTjPsPjP±PsC†PēC,C-PI.  
P—P°PIP†CjPePē PSPμPsP±PsCTjPsC,PSPsPjC† C...P°CTjP°PeC,PμCTjC†  
P·PIBj™ CjP·C†PIP°PSPSCj C,CTjPsPjP±PsC†PēC,Pē, CjPeC- PIC†C,C†PiPēP»Pē C†  
PIP·P°C"†PjPsP†C-C† P· PeP»PsP†C-P†PsPiCTjPμP»PμPj, P·P°P»PēC€P°CHC,CHC†Cj PiC-P†  
PNēPsPiPs P†C-C"† PiCTjPsC,CjPiPsPj C†C†CHPsPiPs C†PIPsPiPs P¶PēC,C,Cj  
(PiCTjPēP±P»PēP·PSPs 7Bj"10 P†PSC-PI), PSPsCTjPjP°P»CHPSP° C„C†PSPeC†C-Cj  
C,CTjPsPjP±PsC†PēC,C-PI PIC-P†PSPsPIP»C†C"†,CHC†Cj P·C- C€PIPēP†PeC-C†C,C†, CjPeP°  
PIC-P†PiPsPIC-P†P°C" C€PIPēP†PePsC†C,C- PsPSPsPIP»PμPSPSCj C,CTjPsPjP±PsC†PēC,C-PI.  
PjPiCTjPμPiP°C†C-Cj C,CTjPsPjP±PsC†PēC,C-PI, CjPeC† PIPēPeP»PēPeP°CHC,CH C-PSC€C-,  
PeCTjC-Pj PjP"Pa, P°PiPsPSC-C†C,Pē, C,P°PePsP¶ C-PSPiC-P±C†C"†,CHC†Cj C€P»CjC...PsPj  
P±P»PsPeC†PIP°PSPSCj P°PjPiP»C-C„C-PeP°C†C-C— P°PeC,PēPIP°C†C-C—  
C,CTjPsPjP±PsC†PēC,C-PI P·P° P†PsPiPsPjPsPiPsC† PjP"Pa, CjPePēPNē  
PIPēPIC-P»CHPSCjC"†,CHC†Cj.

PjC†PeC-P»CHPePē P°PeC,PēPIPsPēPNē PjPμC,P°P±PsP»C-C, C†C,PIPsCTjC†C"†,CHC†Cj P·P°  
P†PsPiPsPjPsPiPsC† C„PμCTjPjPμPSC,C-PI C†PēC†C,PμPjPē C†PēC,PsC...CTjPsPjC† CYP450, P°  
P†PμCjPeC- P· PSPeC... C" PiPsP»C-PjPsCTjC„PSPēPjPē P°P±Ps PiCTjPēPiPSC-C†C†C,CHC†Cj  
C-PSC€PēPjPē P»C-PeP°CTjC†CHPePēPjPē P·P°C†PsP±P°PjPē, PSPμ C† PIC†C-C...  
PiP°C†C-C"†PSC,C-PI PIC-P†P±C†PIP°C"†,CHC†Cj PIC-P†PiPsPIC-P†PSPμ  
PiCTjPēPiPSC-C†PμPSPSCj C,CTjPsPjP±PsC†PēC,C-PI.

PaP°CTjPjP°PePsP†PēPSP°PjC-C±PSC- PμC„PμPeC,Pē

P<sub>μ</sub>PsPIC,PsC<sub>7</sub>PSP<sub>μ</sub> P·P°C<sub>1</sub>C,PSC<sub>1</sub>C<sub>1</sub>PIP°PSPSC<sub>1</sub> PeP»PsP<sub>1</sub>C-PrPsPiC<sub>7</sub>P<sub>μ</sub>P»C<sub>7</sub> C<sub>1</sub> PrPsP·C- 75 PjPi  
 PSP° PrPsP±C<sub>1</sub> P·PSP°C±PSPsC<sub>7</sub> PjC-C<sub>7</sub>PsC<sub>7</sub> PiC<sub>7</sub>P<sub>1</sub>PiPSC-C±C<sub>1</sub>PIP°P»PsB B B B B B B B  
 P<sub>7</sub>P°P<sub>1</sub>-C-PSP<sub>1</sub>C<sub>1</sub>PePsPIP°PSC<sub>1</sub> P°PiC<sub>7</sub>P<sub>μ</sub>PiP°C<sub>1</sub>C-C<sub>7</sub> C,C<sub>7</sub>PsPjP±PsC<sub>1</sub>P<sub>1</sub>PeC,C-PI P·  
 PiP<sub>μ</sub>C<sub>7</sub>C<sub>1</sub>PePsPiPs PrPSC<sub>1</sub> P·P°C<sub>1</sub>C,PSC<sub>1</sub>C<sub>1</sub>PIP°PSPSC<sub>1</sub>; C,P°PeP<sub>1</sub>PN<sub>1</sub> P<sub>μ</sub>C,,P<sub>μ</sub>PeC,  
 PiPsC<sub>1</sub>C,C<sub>1</sub>PiPsPiPs P·P±C-P»CHC<sub>1</sub>C<sub>1</sub>PIP°PIC<sub>1</sub>C<sub>1</sub> C- PIP<sub>1</sub>PeC...PsPrP<sub>1</sub>PI PSP°  
 PiPsC<sub>1</sub>C,C-PN<sub>1</sub>PSP<sub>1</sub>PN<sub>1</sub> C<sub>7</sub>C-PIP<sub>μ</sub>PSCH P· PrPsC<sub>1</sub>C<sub>1</sub>PiPSP<sub>μ</sub>PSPSC<sub>1</sub>Pj  
 C<sub>7</sub>C-PIPSPsPIP°P<sub>1</sub>PSPsPiPs C<sub>1</sub>C,P°PSC<sub>1</sub> PSP° 3B<sub>7</sub>“7-PN<sub>1</sub> PrP<sub>μ</sub>PSCH. Pj  
 C<sub>7</sub>C-PIPSPsPIP°P<sub>1</sub>PSPsPjC<sub>1</sub> C<sub>1</sub>C,P°PSC- C<sub>1</sub>P<sub>μ</sub>C<sub>7</sub>P<sub>μ</sub>PrPSC-PN<sub>1</sub> C<sub>7</sub>C-PIP<sub>μ</sub>PSCH  
 PiC<sub>7</sub>P<sub>1</sub>PiPSC-C±P<sub>μ</sub>PSPSC<sub>1</sub> C,C<sub>7</sub>PsPjP±PsC<sub>1</sub>P<sub>1</sub>PeC,C-PI, C°Ps C<sub>1</sub>PiPsC<sub>1</sub>C,P<sub>μ</sub>C<sub>7</sub>C-PiP°PIC<sub>1</sub>C<sub>1</sub>  
 PSP° C,P»C- PrPsP·P<sub>1</sub> 75 PjPi PSP° PrPsP±C<sub>1</sub>, C<sub>1</sub>C,P°PSPsPIP<sub>1</sub>PI PIC-Pr 40 PrPs 60 %.  
 P<sub>7</sub>PiC<sub>7</sub>P<sub>μ</sub>PiP°C<sub>1</sub>C-C<sub>1</sub> C,C<sub>7</sub>PsPjP±PsC<sub>1</sub>P<sub>1</sub>PeC,C-PI C,P° C±P°C<sub>1</sub> PeC<sub>7</sub>PsPiPsC,P<sub>μ</sub>C±C-  
 PiPsC<sub>1</sub>C,C<sub>1</sub>PiPsPiPs PiPsPiP<sub>μ</sub>C<sub>7</sub>C,P°P»P<sub>1</sub>C<sub>1</sub>C<sub>1</sub> PrPs PIP<sub>1</sub>PeC...C-PrPSPsPiPs C<sub>7</sub>C-PIPSC<sub>1</sub>  
 P·P°PiP°P»PsPj PiC<sub>7</sub>PsC,C<sub>1</sub>PiPsPj 5 PrPSC-PI.

P<sub>7</sub>C<sub>1</sub>P<sub>μ</sub>C,P<sub>1</sub>PeP»C<sub>1</sub>P°P»C-C<sub>1</sub>P<sub>1</sub>PeP»PsPIP° PeP<sub>1</sub>C<sub>1</sub>P»PsC,P° PiC<sub>7</sub>P<sub>1</sub>PiPSC-C±C<sub>1</sub>C”  
 P°PiC<sub>7</sub>P<sub>μ</sub>PiP°C<sub>1</sub>C-C<sub>7</sub> C,C<sub>7</sub>PsPjP±PsC<sub>1</sub>P<sub>1</sub>PeC,C-PI C<sub>1</sub>PeP»C<sub>1</sub>C...PsPj PSP<sub>μ</sub>PsP±PsC<sub>7</sub>PsC,PSPsPiPs  
 PiC<sub>7</sub>P<sub>1</sub>PiPSC-C±P<sub>μ</sub>PSPSC<sub>1</sub> PiC<sub>7</sub>PsC<sub>1</sub>C,P°PiP»P°PSP<sub>1</sub>PePSC-PI  
 C<sub>1</sub>P<sub>1</sub>PeP»PsPsPeC<sub>1</sub>P<sub>1</sub>PiP<sub>μ</sub>PSP°P·P<sub>1</sub>Pe C-, C,P°PeP<sub>1</sub>Pj C±P<sub>1</sub>PePSPsPj, PiC<sub>7</sub>P<sub>1</sub>PiPSC-C±C<sub>1</sub>C”  
 C<sub>1</sub>C,PIPsC<sub>7</sub>P<sub>μ</sub>PSPSC<sub>1</sub> C,C<sub>7</sub>PsPjP±PsPeC<sub>1</sub>P°PSC<sub>1</sub> P<sub>7</sub>, C<sub>1</sub>PeP<sub>1</sub>PN<sub>1</sub> PIP<sub>1</sub>PeP»P<sub>1</sub>PeP°C”  
 P°PiC<sub>7</sub>P<sub>μ</sub>PiP°C<sub>1</sub>C-C<sub>7</sub> C,C<sub>7</sub>PsPjP±PsC<sub>1</sub>P<sub>1</sub>PeC,C-PI C,P° PIP°P·PsPePsPSC<sub>1</sub>C,C<sub>7</sub>P<sub>1</sub>PeC<sub>1</sub>C-C<sub>7</sub>. P<sub>1</sub>P<sub>μ</sub>PN<sub>1</sub>  
 P<sub>μ</sub>C,,P<sub>μ</sub>PeC, C,C<sub>7</sub>P<sub>1</sub>PeP°C” PiC<sub>7</sub>PsC,C<sub>1</sub>PiPsPj C<sub>1</sub>C<sub>1</sub>CH<sub>1</sub>PsPiPs P<sub>1</sub>PeC,C,C<sub>1</sub>  
 C,C<sub>7</sub>PsPjP±PsC<sub>1</sub>P<sub>1</sub>PeC,C-PI.

*P<sub>1</sub>PeP°C<sub>7</sub>PjP°PePsPeC-PSP<sub>μ</sub>C,P<sub>1</sub>PeP°.*

P<sub>7</sub>C<sub>1</sub>P<sub>μ</sub>C,P<sub>1</sub>PeP»C<sub>1</sub>P°P»C-C<sub>1</sub>P<sub>1</sub>PeP»PsPIP° PeP<sub>1</sub>C<sub>1</sub>P»PsC,P°

P<sub>7</sub>P±C<sub>1</sub>PsC<sub>7</sub>P±C<sub>1</sub>C-C<sub>1</sub>

P<sub>7</sub>C<sub>1</sub>P<sub>μ</sub>C,P<sub>1</sub>PeP»C<sub>1</sub>P°P»C-C<sub>1</sub>P<sub>1</sub>PeP»PsPIP° PeP<sub>1</sub>C<sub>1</sub>P»PsC,P° PiC-C<sub>1</sub>P»C<sub>1</sub> P°P±C<sub>1</sub>PsC<sub>7</sub>P±C<sub>1</sub>C-C—  
 C<sub>1</sub>PeP»C<sub>1</sub>C...PsPj PiC-PrC<sub>7</sub>PsP»C-P·C<sub>1</sub> PiP<sub>μ</sub>C<sub>7</sub>P<sub>μ</sub>C,PIPsC<sub>7</sub>C<sub>7</sub>C”C,CHC<sub>1</sub>C<sub>1</sub> PSP°  
 C<sub>1</sub>P°P»C-C<sub>1</sub>P<sub>1</sub>PeP»PsPIC<sub>1</sub> PeP<sub>1</sub>C<sub>1</sub>P»PsC,C<sub>1</sub>. P<sub>μ</sub>C-PePsPIP<sub>1</sub>PN<sub>1</sub> C<sub>7</sub>C-PIP<sub>μ</sub>PSCH  
 C<sub>1</sub>P°P»C-C<sub>1</sub>P<sub>1</sub>PeP»PsPiPs— PeP<sub>1</sub>C<sub>1</sub>P»PsC,P<sub>1</sub>Pe C<sub>1</sub> PiP»P°P·PjC- PeC<sub>7</sub>PsPIC-  
 PrPsC<sub>1</sub>C<sub>1</sub>PiP°C”C,CHC<sub>1</sub>C<sub>1</sub> PiC<sub>7</sub>PsC,C<sub>1</sub>PiPsPj 1 PiPsPrP<sub>1</sub>PePSP<sub>1</sub> PiC-C<sub>1</sub>P»C<sub>1</sub>  
 P·P°C<sub>1</sub>C,PSC<sub>1</sub>C<sub>1</sub>PIP°PSPSC<sub>1</sub>. P<sub>7</sub>P°PeP<sub>1</sub>Pj C±P<sub>1</sub>PePSPsPj, C<sub>7</sub>C-PIP<sub>μ</sub>PSCH  
 P°C<sub>1</sub>P<sub>μ</sub>C,P<sub>1</sub>PeP»C<sub>1</sub>P°P»C-C<sub>1</sub>P<sub>1</sub>PeP»PsPiPs— PeP<sub>1</sub>C<sub>1</sub>P»PsC,P<sub>1</sub>Pe PI PiP»P°P·PjC- PeC<sub>7</sub>PsPIC-  
 P·PSP°C...PsPrP<sub>1</sub>PeC,CHC<sub>1</sub>C<sub>1</sub> PiPsP·P° PjP<sub>μ</sub>P<sub>1</sub>P<sub>μ</sub>C PIP<sub>1</sub>PeP·PSP°C±P<sub>μ</sub>PSPSC<sub>1</sub> C±P<sub>μ</sub>C<sub>7</sub>P<sub>μ</sub>P· 1,5B<sub>7</sub>“3  
 PiPsPrP<sub>1</sub>PePSP<sub>1</sub> PiC-C<sub>1</sub>P»C<sub>1</sub> P·P°C<sub>1</sub>C,PSC<sub>1</sub>C<sub>1</sub>PIP°PSPSC<sub>1</sub> P»C-PeP°C<sub>7</sub>C<sub>1</sub>CH<sub>1</sub>PePsPiPs  
 P·P°C<sub>1</sub>PsP±C<sub>1</sub>.

P PsP·PiPsPrC-P»

P<sub>7</sub>C<sub>1</sub>P<sub>μ</sub>C,P<sub>1</sub>PeP»C<sub>1</sub>P°P»C-C<sub>1</sub>P<sub>1</sub>PeP»PsPIP° PeP<sub>1</sub>C<sub>1</sub>P»PsC,P° PiPsPiP°PSPs  
 P·PiB<sub>7</sub>™ C<sub>1</sub>P·C<sub>1</sub>C”C,CHC<sub>1</sub>C<sub>1</sub> P· P±C-P»PeP°PjP<sub>1</sub>Pe PiP»P°P·PjP<sub>1</sub>Pe PeC<sub>7</sub>PsPIC-, PIPsPSP° PjP°C”  
 PSP<sub>1</sub>PeP·CH<sub>1</sub>PeP<sub>1</sub>PN<sub>1</sub> C<sub>7</sub>C-PIP<sub>μ</sub>PSCH C<sub>7</sub>PsP·PiPsPrC-P»C<sub>1</sub> (10 P»). P±C— PjP<sub>μ</sub>C,P°P±PsP»C-C,,  
 C<sub>1</sub>P°P»C-C<sub>1</sub>P<sub>1</sub>PeP»PsPIP° PeP<sub>1</sub>C<sub>1</sub>P»PsC,P°, C<sub>1</sub>PIP<sub>1</sub>PePrPePs P·PiB<sub>7</sub>™ C<sub>1</sub>P·C<sub>1</sub>C”C,CHC<sub>1</sub>C<sub>1</sub> P·  
 P±C-P»PeP°PjP<sub>1</sub>Pe PiP»P°P·PjP<sub>1</sub>Pe PeC<sub>7</sub>PsPIC-, P°P»P<sub>μ</sub> P·PiB<sub>7</sub>™ C<sub>1</sub>P·C<sub>1</sub>PIP°PSPSC<sub>1</sub>  
 P·P°P»P<sub>μ</sub>P<sub>1</sub>PeC,CH PIC-Pr PePsPSC<sub>1</sub>P<sub>μ</sub>PSC,C<sub>7</sub>P°C<sub>1</sub>C-C— (PSP<sub>μ</sub>P»C-PSC-PN<sub>1</sub>PSP<sub>μ</sub>). P<sub>μ</sub>C<sub>7</sub>P<sub>1</sub>Pe  
 PSP<sub>1</sub>PeP·CH<sub>1</sub>PeP<sub>1</sub>PeC... PePsPSC<sub>1</sub>P<sub>μ</sub>PSC,C<sub>7</sub>P°C<sub>1</sub>C-C<sub>1</sub>C... (< 100 PjPePi/PjP») PiC<sub>7</sub>P<sub>1</sub>PeP±P»P<sub>1</sub>PeP·PSPs 90  
 % C<sub>1</sub>P°P»C-C<sub>1</sub>P<sub>1</sub>PeP»PsPiPs— PeP<sub>1</sub>C<sub>1</sub>P»PsC,P<sub>1</sub>Pe P·PiB<sub>7</sub>™ C<sub>1</sub>P·C<sub>1</sub>C”C,CHC<sub>1</sub>C<sub>1</sub> P·  
 P°P»CH<sub>1</sub>P±C<sub>1</sub>PjC-PSPsPj. P<sub>7</sub>P°P»C-C<sub>1</sub>P<sub>1</sub>PeP»PsPIP° PeP<sub>1</sub>C<sub>1</sub>P»PsC,P° P»P<sub>μ</sub>PiPePs  
 PiC<sub>7</sub>PsPSP<sub>1</sub>PeP°C” PI C<sub>1</sub>C<sub>1</sub>C- C,PeP°PSP<sub>1</sub>PePSP<sub>1</sub> C,P° C<sub>7</sub>C-PrP<sub>1</sub>PePSP<sub>1</sub> PsC<sub>7</sub>PiP°PSC-P·PjC<sub>1</sub>, C<sub>1</sub>

C,PsPjCf C±PëCfP»C- C†PµPSC,CḡP°P»CHbPSCf PSPµCḡPIPsPICf CfPëCfC,PµPjCf,  
PiCḡCfPrPSPµ PjPsP»PsPePs C,P° C,PeP°PSPëPSPë PiP»PsPrP°.

PḡPµC,P°P±PsP»C-P·Pj C,P° PIPëPIPµPrPµPSPSCf

PḡC†PµC,PëP»CfP°P»C-C†PëP»PsPIP° PePëCfP»PsC,P° CëPIPëPrPePs  
PiPµCḡPµC,PIPsCḡCḡC”C,CHbCfCf CëP»CfC...PsPj PiC-PrCḡPsP»C-P·Cf Cf  
CfP°P»C-C†PëP»PsPICf PePëCfP»PsC,Cf, PiPµCḡC-PsPr PSP°PiC-PIPIPëPIPµPrPµPSPSCf  
CfPePsC— PiCḡPë PrPsP·P°C... P°C†PµC,PëP»CfP°P»C-C†PëP»PsPIPsC— PePëCfP»PsC,Pë  
75bḡ“100 PjPi CfC,P°PSPsPIPëC,CHb 0,3bḡ“0,4 PiPsPrPëPSPë. PŸP°P»C-C†PëP»PsPIP°  
PePëCfP»PsC,P° P·PrPµP±C-P»CHbCëPsPiPs PePsPSbḡ™ CḡPiCfC” PI PiPµC†C-PSC†C-, PrPµ  
CfC,PIPsCḡCḡC”C,CHbCfCf CfP°P»C-C†PëP»CfCḡPëPSPsPIP° PePëCfP»PsC,P°,  
C,,PµPSPsP»PsPIPëPNë PiP»CḡPeCfCḡPsPSC-Pr, P°C†PëP»PsPIPëPNë PiP»CḡPeCfCḡPsPSC-Pr C,P°  
CḡCfPr PIC,PsCḡPëPSPSPëC... PjPµC,P°P±PsP»C-C,P-PI. PµPµCḡC-PsPr PiP»P°P·PjPsPIPsPiPs  
PSP°PiC-PIPIPëPIPµPrPµPSPSCf CfP°P»C-C†PëP»PsPIPsC— PePëCfP»PsC,Pë Cf CfPeP»P°PrC-  
P»C-PeP°CḡCfCḡPePsPiPs P·P°CfPsP±Cf PḡP·PḡP·PḡPŸPḡ CfC,P°PSPsPIPëC,CHb  
PiCḡPëP±P»PëP·PSPs 2 PiPsPrPëPSPë. PḡPµC,P°P±PsP»C-P·Pj CfP°P»C-C†PëP»P°C,C-PI  
C” PSP°CfPëC†PµPSPëPj, P·P°PiP°P»CHbPSPëPNë PeP»C-CḡPµPSCf PsCḡPiP°PSC-P·PjCf  
P·PSPëP¶CfC”C,CHbCfCf Cf CḡP°P·C- PIPëCfPsPePëC... CfPëCḡPsPIP°C,PePsPIPëC...  
PePsPSC†PµPSC,CḡP°C†C-PNë C†PµCḡPµP· PsP±PjPµP¶PµPSCf P·PrP°C,PSC-CfC,CHb  
PiPµC†C-PSPePë CfC,PIPsCḡCḡPIP°C,Pë CfPe CfP°P»C-C†PëP»CfCḡPëPSPsPICf  
PePëCfP»PsC,Cf, C,P°Pe C- C,,PµPSPsP»PsPIPëPNë PiP»CḡPeCfCḡPsPSC-Pr. Pj CḡP°P·C-  
P·P°CfC,PsCfCfPIP°PSPSCf C,PsPeCfPëC†PSPëC... PrPsP· (10bḡ“20 Pi) PiPµCḡC-PsPr  
PSP°PiC-PIPIPëPIPµPrPµPSPSCf P· PiP»P°P·PjPë PeCḡPsPIC- PjPsP¶Pµ  
PiPµCḡPµPIPëC%oCfPIP°C,Pë 20 PiPsPrPëPS. Pj CḡP°P·C- P·P°CfC,PsCfCfPIP°PSPSCf  
PIPëCfPsPePëC... PrPsP· P°C†PµC,PëP»CfP°P»C-C†PëP»PsPIPsC— PePëCfP»PsC,Pë  
PIPëPIPµPrPµPSPSCf CfP°P»C-C†PëP»PsPIPsC— PePëCfP»PsC,Pë  
PiC-PrPiPsCḡCfPrPePsPICfC”C,CHbCfCf PeC-PSPµC,PëC†C- PSCfP»CHbPsPIPsPiPs  
PiPsCḡCfPrPeCf (C,PsP±C,Ps CëPIPëPrPeC-CfC,CHb PIPëPIPµPrPµPSPSCf C”  
PiPsCfC,C-PNëPSPsCḡ PIC-PrPSPsCfPSPs PePsPSC†PµPSC,CḡP°C†C-C— Cf PiP»P°P·PjC-  
PeCḡPsPIC-), PiCḡPë C†CHbPsPjCf C,,P°PeC,PëC†PSPëPNë PiPµCḡC-PsPr  
PSP°PiC-PIPIPëPIPµPrPµPSPSCf CfC,P°PSPsPIPëC,CHb 6 PiPsPrPëPS C-  
P±C-P»CHbCëPµ. PkPëCḡPePsPIP° PµPeCfPeCḡPµC†C-Cf PSPµP·PjC-PSPµPSPsC—  
P°PeC,PëPIPSPsC— CḡPµC†PsPIPëPSPë P·P°P»PµP¶PëC,CHb PIC-Pr CḡPk CfPµC†C-.  
PḡCfPeC-P»CHbPePë P·PSP°C†PµPSPSCf CḡPk CfPµC†C- PiPµCḡPµPIPëC%oCfC” 6,5,  
PSPëCḡPePsPIPëPNë PeP»C-CḡPµPSCf PIC-P»CHbPSPsPiPs CfP°P»C-C†PëP»P°C,Cf  
P·P±C-P»CHbCëCfC”C,CHbCfCf P· 5 PrPs 80 %. PµC-CfP»Cf  
P·P°CfC,PsCfCfPIP°PSPSCf C,PµCḡP°PiPµPIC,PëC†PSPëC... PrPsP·  
PiCḡPëP±P»PëP·PSPs 10 % CfPiPsCfC,PµCḡC-PiP°C”C,CHbCfCf PI CfPµC†C- Cf  
C,,PsCḡPjC- CfP°P»C-C†PëP»PsPIPsC— PePëCfP»PsC,Pë, 75 % Cf C,,PsCḡPjC-  
CfP°P»C-C†PëP»CfCḡPëPSPsPIPsC— PePëCfP»PsC,Pë, 10 % Cf C,,PsCḡPjC-  
C,,PµPSPsP»PsPIPsPiPs C,P° 5 % Cf C,,PsCḡPjC- P°C†PëP»PsPIPsPiPs  
PiP»CḡPeCfCḡPsPSC-PrCf CfP°P»C-C†PëP»PsPIPsC— PePëCfP»PsC,Pë.

P— PsPiP»CfPrCf PSP° C,,P°CḡPjP°PePsPeC-PSPµC,PëC†PSC- C,P° PjPµC,P°P±PsP»C-C†PSC-  
C...P°CḡP°PeC,PµCḡPëCfC,PëPePë PsP±PsC... CfPiPsP»CfPe PIPëPSPëPePSPµPSPSCf  
PeP»C-PSC-C†PSPs P·PSP°C†PëPjPsC— C,,P°CḡPjP°PePsPeC-PSPµC,PëC†PSPsC—  
PIP·P°C”PjPsPrC-C— PjP°P»PsPNëPjPsPIC-CḡPSPµ.

$\text{P}\mu\text{C}-\text{C}\acute{\text{I}}\text{P}\gg\text{C}\text{I}\text{I} \text{ PsPrPSPsC}\eta\text{P}^{\circ}\text{P}\cdot\text{PsPIP}\text{PsPiPs} \text{ P}\cdot\text{P}^{\circ}\text{C}\acute{\text{I}}\text{C},\text{PsC}\acute{\text{I}}\text{C}\acute{\text{r}}\text{PIP}^{\circ}\text{PSPSC}\text{I}\text{I}$   
 $\text{PeP}\gg\text{PsPiC}-\text{PrPsPiC}\eta\text{P}\mu\text{P}\gg\text{C}\eta \text{ Cr} \text{ PSP}^{\circ}\text{PIP}^{\circ}\text{PSC},\text{P}^{\circ}\text{P}\P\text{C}\acute{\text{r}}\text{PIP}^{\circ}\text{P}\gg\text{CH}\eta\text{PSC}-\text{PN}_{\text{e}} \text{ PrPsP}\cdot\text{C}-300 \text{ PjPi}$   
 $\text{PiPsPeP}^{\circ}\text{P}\cdot\text{PSP}\ddot{\text{P}}\text{e} \text{ C}_{\text{max}} \text{ P}^{\circ}\text{PeC},\text{P}\ddot{\text{e}}\text{PIPSPsPiPs} \text{ PjP}\mu\text{C},\text{P}^{\circ}\text{P}\pm\text{PsP}\gg\text{C}-\text{C},\text{Cr} \text{ Cr} 2 \text{ C}\eta\text{P}^{\circ}\text{P}\cdot\text{P}\ddot{\text{e}} \text{ PIP}\ddot{\text{e}}\text{C}\%_{\text{o}}\text{P}\ddot{\text{e}}\text{PN}_{\text{e}},$   
 $\text{PSC}-\text{P}\P \text{ PiC}-\text{C}\acute{\text{I}}\text{P}\gg\text{C}\text{I}\text{I} \text{ P}\cdot\text{P}^{\circ}\text{C}\acute{\text{I}}\text{C},\text{PsC}\acute{\text{I}}\text{C}\acute{\text{r}}\text{PIP}^{\circ}\text{PSPSC}\text{I}\text{I} \text{ PiC}\eta\text{P}\mu\text{PiP}^{\circ}\text{C}\eta\text{P}^{\circ}\text{C},\text{Cr} \text{ Cr}$

РiС-РrС,СђРёРjСrСђСђС-РNё РrPsP·C- 75 РjРi РiСђРsС,СђРiPsРj 4 РrPSC-PI. C<sub>max</sub>  
РrPsСђСђРiP°С"С,СђСђСђСђ РiСђРёР±Р»РёР·PSPs СђРµСђРµР· 30вђ"60 С...PIРёР»РёPS  
РiС-СђР»Сђ Р·Р°СђС,PsСђСђРiР°PSPSCђ Р»С-РёР°СђСђСђРёPsРiPs Р·Р°СђРsР±Сђ.

#### Р'РёPIРµРrРµPSPSCђ

РµСђРsС,СђРiPsРj 120 РiPsРrРёPS РiС-СђР»Сђ РiРµСђРsСђР°Р»СђPSPsРiPs  
Р·Р°СђС,PsСђСђРiР°PSPSCђ Р»СђРrРёPSPsСђ 14РŸ-РjС-СђРµPSPsРiPs  
РёР»РsРiС-РrPsРiСђРµР»Сђ РiСђРёР±Р»РёР·PSPs 50 % PIРёРrС-Р»СђР»PsСђСђС C-Р·  
СђРµСђРµСђС C- РiСђРёР±Р»РёР·PSPs 46 % вђ" Р· РёР°Р»РsРj. РµС-СђР»Сђ  
PsРrPSPsСђР°Р·PsРiPsРiPs РiРµСђРsСђР°Р»СђPSPsРiPs Р·Р°СђС,PsСђСђРiР°PSPSCђ РrPsР·Рё  
75 РjРi РiРµСђС-РsРr PSP°РiС-PIРiРёPIРµРrРµPSPSCђ СђС,Р°PSPsРiРёPI РiСђРёР±Р»РёР·PSPs  
6 РiPsРrРёPS. РµРµСђС-РsРr PSP°РiС-PIРiРёPIРµРrРµPSPSCђ PsСђСђРiРsРiPs  
СђРёСђРёСђР»СђСђСђРiPs (PSPµР°РёС,РёPIРsРiPs) РjРµС,Р°Р±РsР»С-С,Сђ  
СђС,Р°PSPsРiРёPI 8 РiPsРrРёPS РiС-СђР»Сђ PsРrPSPsСђР°Р·PsРiPs Р°Р±Рs  
РiPsРiС,PsСђPSPsРiPs Р·Р°СђС,PsСђСђРiР°PSPSCђ.

#### РrР°СђРjР°РёPsРiРµPSPµС,РёРёР°°

РµР»Р»РsРiС-РrPsРiСђРµР»Сђ Р°РёС,РёPIСђСђС,Сђ РrРµРёС-Р»СђРёР°°  
РiPsР»С-РjPsСђС„PSPёС... С-Р·PsС„РµСђРjРµPSC,С-PI CYP450. CYP2РŸ19 Р±РµСђРµ  
СђСђР°СђС,Сђ PI СђС,PIPsСђРµPSC- СђРё Р°РёС,РёPIРsРiPs РjРµС,Р°Р±РsР»С-С,Сђ, С,Р°Рё  
С- РiСђРsРjС-Р¶PSPsРiPs РjРµС,Р°Р±РsР»С-С,Сђ 2-РsРёСђРs-РёР»РsРiС-РrPsРiСђРµР»Сђ. Р—Р°  
РrР°PSPёРjРё РёС-Р»СђРёС-СђPSPsРiPs PIРёР·PSP°СђРµPSPSCђ Р°РiСђРµРiР°СђС-С—  
С,СђРsРjР±РsСђРёС,С-PI ex vivo С„Р°СђРjР°РёPsРёС-РSPµС,РёСђPSC- РiPsРёР°Р·PSPёРёС,Р°  
Р°PSC,РёС,СђРsРjР±РsС,РёСђPSP° РrС-Сђ Р°РёС,РёPIРsРiPs РjРµС,Р°Р±РsР»С-С,Сђ  
РёР»РsРiС-РrPsРiСђРµР»Сђ PIC-РrСђС-Р·PSCђСђС,СђСђСђС PIC-РrРiPsPIC-РrPSPs РrPs  
РiРµPSPsС,РёРiСђ CYP2РŸ19.

CYP2РŸ19\*1 Р°Р»РµР»СђС PIC-РrРiPsPIC-РrР°С" РiPsPIРSC-СђС,Сђ  
С„СђPSPёСђС-РsPSP°Р»СђPSPsРjСђ РjРµС,Р°Р±РsР»С-Р·РjСђ, С,PsРrС- СђРё Р°Р»Р»С-С-  
CYP2РŸ19\*2 С,Р° CYP2РŸ19\*3 PIC-РrРiPsPIC-РrР°СђС,Сђ Р·PSPёР¶РµPSPsРjСђ  
РjРµС,Р°Р±РsР»С-Р·РjСђ. РќР° СђР°С...СђPSPsРё Р°Р»Р»Р»Рµ CYP2РŸ19\*2 С,Р° CYP2РŸ19\*3  
PIC-РrPSPsСђСђС,Сђ 85 % Р°Р»Р»Р»Рµ Р·PSPёР¶РµPSPsС— С„СђPSPёСђС-С— Сђ  
Р¶РёС,РµР»С-PI РµР°РiРёР°Р·Сђ С,Р° 99 % вђ" PI СђСђРsРrР¶РµPSCђС-PI РёР·С-С—. Р"Ps  
С-PSCёРёС... Р°Р»Р»Р»Рµ, РiPsРiвђ™ СђР·Р°PSPёС... Р·С- Р·PSPёР¶РµPSPёРj  
РjРµС,Р°Р±РsР»С-Р·РjPsРj, PSP°Р»РµР¶Р°С,Сђ CYP2РŸ19\*4, \*5, \*6, \*7 С,Р° \*8, Р°Р»Рµ PI  
Р·Р°РiР°Р»СђСђС-РNё РiPsРiСђР»СђСђС— PIРsPSPё Р·СђСђС,СђС-СђР°СђС,СђСђСђС  
РjРµPSCё СђР°СђС,Ps.

РµР°СђС-С"РSC, Р·С- Р·PSPёР¶РµPSPёРj РjРµС,Р°Р±РsР»С-Р·РjPsРj РjР°С" РrPIC-  
С„СђPSPёСђС-РsPSP°Р»СђPSC- Р°Р»Р»Р»С-, СђРё PIРёР·PSP°СђРµPSPs PIРёС%Рµ.  
Р—РiС-РrPSPs Р· PsРiСђР±Р»С-РёPsPIР°PSPёРjРё РrР°PSPёРjРё, РiРµPSPsС,РёРiРёС-Р·  
РiPsPIC-Р»СђPSPёРj РjРµС,Р°Р±РsР»С-Р·РjPsРj CYP2РŸ19 Р·СђСђС,СђС-СђР°СђС,СђСђСђС  
РiСђРёР±Р»РёР·PSPs Сђ 2 % РiСђРµРrСђС,Р°PIРsРёРёС-PI С"РiСђРsРiРµРsС—РrPSPsС—  
СђР°СђРё, 4 % вђ" PSPµРiСђРsС—РrPSPsС— СђР°СђРёС C- 14 % РёРёС,Р°РNёСђС-PI.  
Р—Р°СђР°Р·С-С-СђPSCрСђС,Сђ С,РµСђС,Рё РrР»Сђ PIРёР·PSP°СђРµPSPSCђ РiРµPSPsС,РёРiСђ  
CYP2РŸ19 РiР°СђС-С"РSC,Р°.

#### РёСђРsР±Р»РёР·РёPIC- РiСђСђРiРё РiР°СђС-С"РSC,С-PI

Р'С-РrPsРjPsСђС,С- С%PsРrPs С„Р°СђРjР°РёPsРёС-РSPµС,РёСђPSPёС... РiР°СђР°РjРµС,СђС-PI

$$\begin{aligned} & \text{P}_\text{L}\text{P} \gg \text{P}_\text{H}\text{P}'\text{P}_\text{H}\text{P}\check{\text{P}}\text{P}_\text{L} \text{ в } \check{\text{H}} \text{ " } \text{PePsPjP} \pm \text{C-PSPsPIP}^\circ \text{PSP}\check{\text{e}}\text{PN}_\circ \text{ P} \gg \text{C-PeP}^\circ \text{C}\check{\text{H}}\text{C}\check{\text{I}}\text{C}\check{\text{H}}\text{PeP}\check{\text{e}}\text{PN}_\circ \text{ P} \cdot \text{P}^\circ \text{C}\check{\text{I}}\text{C-P} \pm \\ & \text{C}_{,,} \text{C-PeC}\check{\text{I}}\text{PsPIP}^\circ \text{PSP}\check{\text{e}}\text{C} \dots \text{PrPsP} \cdot \text{PrP} \gg \text{C}\check{\text{I}} \text{ P}\check{\text{i}}\text{C}\check{\text{H}}\text{PsPrPsPIP}\P\text{P}\mu\text{PSPSC}\check{\text{I}} \text{ C, P}\mu\text{C}\check{\text{H}}\text{P}^\circ \text{P}\check{\text{i}}\text{C-C} \text{— Cr} \end{aligned}$$

СҒP°P·C-:

- PiPsCГC,СҒPsPiPs PePsСҒPsPSP°СҒPSPsPiPs CГPёPSPrСҒPsPjCр P±PµP· PиC-PrPNёPsPjCр CГPµPiPjPµPSC,P° ST (PSPµCГC,P°P±C-P»СҒPSP° CГC,PµPSPsPeP°СҒPrC-СҒ P°P±Ps C-PSC,,P°СҒPeC, PjC-PsPeP°СҒPrP° P±PµP· PиP°C,PsP»PsPiC-C±PSPsPiPs P·CрP±CГCҒ Q PSP° P·PлP”), Cр C,PsPjCр C±PёCГP»C- Cр PиP°CГC-”PSC,C-PI, СҒPePёPj P±CрP»Ps PиСҒPsPiPµPrPµPSPs CГC,PµPSC,CрPiP°PSPSCҒ PиC-Pr C±P°CГ C±PµСҒPµP·CёPeC-СҒPSPsPiPs PePsСҒPsPSP°СҒPSPsPiPs PIC,СҒCрC±P°PSPSCҒ;
- PiPsCГC,СҒPsPiPs C-PSC,,P°СҒPeC,Cр PjC-PsPeP°СҒPrP° P· PиC-PrPNёPsPjPsPj CГPµPiPjPµPSC,P° ST Cр PиP°CГC-C”PSC,C-PI, СҒPeC- PsC,СҒPёPjCрСҒC,СҒ PjPµPrPёPeP°PjPµPSC,PsP·PSPµ P»C-PeCрPiP°PSPSCҒ, C,P° P·P° PjPsP¶P»PёPiPsCГC,C- PиСҒPsPiPµPrPµPSPSCҒ C,СҒPsPjP±PsP»C-P·PёCГCр.

***PµСҒPsC,PёPiPsPeP°P·P°PSPSCҒ.***

- PµC-PrPiPёC%oPµPSP° C±CрC,P»PёPIC-CГC,СҒ PrPs PrC-СҒC±PёC... СҒPµC±PsPiPёPS P°P±Ps P±CрPrСҒC-СҒPePsC— PrPsPiPsPjC-P¶PSPsC— СҒPµC±PsPiPёPSPё P»C-PeP°СҒCГCҒPePsPiPs P·P°CГPsP±Cр;
- C,СҒP¶PeP° PиPµC±C-PSPePsPiP° PSPµPrPsCГC,P°C,PSC-CГC,СҒ;
- PiPsCГC,СҒP° PиP°C,PsP»PsPiC-C±PSP° PeСҒPsPiPsC,PµC±P°, C,P°PeP° СҒPe PeСҒPsPiPsC,PµC±P° P· PиPµPиC,PёC±PSPsC— PiPёСҒP°P·PePё P°P±Ps PiPSCрC,СҒC-CёPSCҒPsC±PµСҒPµPiPSPёPNё PeСҒPsPiPsPiPёP»PёPI;
- PиC-PrPiPёC%oPµPSP° C±CрC,P»PёPIC-CГC,СҒ PrPs PSPµCГC,PµСҒPsC—PrPSPёC... PиСҒPsC,PёP·P°PиP°P»СҒPSPёC... P·P°CГPsP±C-PI (PкPµP—P—), P±СҒPsPSC...C-P°P»СҒPSP° P°CГC,PjP°, СҒPёPSC-C,, PSP°P·P°P»СҒPSC- PиPsP»C-PиPё. PлP°CГC,PsCГPёC,PsP·, PePsP»Pё P·P°CГC,PsCГCрPiP°PSPSCҒ P°CГPµC,PёP»CГP°P»C-CГPёP»PsPiPsC— PePёCГP»PsC,Pё PjPsP¶Pµ PiPёPeP»PёPeP°C,Pё C,СҒP¶PeC- СҒPµP°PeCГC-C— PiC-PиPµСҒC±CрC,P»PёPiPsCГC,C- (PiPeP»СҒC±P°СҒC±Pё CГPёСҒPeCрP»СҒC,PsСҒPSPёPNё CёPsPe P· PиСҒPёPиP»PёPiP°PjPё PeСҒPsPIC-, P°СҒC,PµСҒC-P°P»СҒPSCр PiC-PиPsC,PµPSP·C-СҒ, C,P°C...C-PeP°СҒPrC-СҒ C- P±P»СҒPiP°PSPSCҒ);
- C,СҒP¶PeP° PSPёСҒPePsPiP° PSPµPrPsCГC,P°C,PSC-CГC,СҒ (PeP»C-СҒPµPSCГ PeСҒPµP°C,PёPSC-PSCр < 30 PjP»/C...PI);
- PiPsCГC,СҒC- PиPµPиC,PёC±PSC- PiPёСҒP°P·PePё;
- PiPµPjPsСҒP°PiC-C±PSPёPNё PrC-P°C,PµP·;
- CГPµСҒCГPµPiP° PSPµPrPsCГC,P°C,PSC-CГC,СҒ C,СҒP¶PePsPiPs CГC,CрPиPµPSCҒ;
- PsPrPSPsC±P°CГPSPµ P·P°CГC,PsCГCрPiP°PSPSCҒ P°CГPµC,PёP»CГP°P»C-CГPёP»PsPiPsC— PePёCГP»PsC,Pё C,P° PjPµC,PsC,СҒPµPeCГP°C,Cр Cр PrPsP·P°C... B B B B B B B B B B B B B B B B B B B 15 PjPi/C,PёP¶PrPµPSCҒ C- P±C-P»СҒCёPµ (Cр P·PiBҒ™ СҒP·PeCр P· PиC-PrPiPёC%oPµPSPSCҒPj PiPµPjP°C,PsP»PsPiC-C±PSPsC— C,PsPeCГPёC±PSPsCГC,C- PjPµC,PsC,СҒPµPeCГP°C,Cр PIC-PrP±CрPiP°C”C,СҒCГCҒ P·PSPёP¶PµPSPSCҒ PSPёСҒPePsPiPsPiPs PeP»C-СҒPµPSCГCр PjPµC,PsC,СҒPµPeCГP°C,Cр PиСҒPsC,PёP·P°PиP°P»СҒPSPёPjPё P°PiPµPSC,P°PjPё C- PiPёC,C-CГPSPµPSPSCҒ



$$\text{Pj PeP} \gg \text{C-PSC-C} \pm \text{PSPsPjCr} \text{ PrPsCrP} \gg \text{C-PrP} \text{ PuPSPSC-}, \text{PiChPsPiPuPrPuPSPsPjCr P} \cdot \text{P}^\circ$$

CрC±P°CГC, Cґ P·PrPsCґPsPIPёC... PrPsP±CґPsPIPсP»CHC†C-PI, PeP»PsPiC-PrPsPiCґPµP»CH  
 PSPµ PIPёPjP°PiP°PI P·PjC-PSPё PrPsP·Pё PiPµPiP°CґPёPSCр C, P° PSPµ P·PjC-PSCґPIP°PI  
 PIPiP»PёPI PiPµPiP°CґPёPSCр PSP° PePsP°PiCрP»CґC†C-Cґ. PhPrPSPсC±P°CГPSPµ  
 P·P°CГC, PsCГCрPIP°PSPSCґ PiPµPiP°CґPёPSCр PSPµ PIPiP»PёPIP°C” PSP°  
 PiCґPёPiPSC-C±CрPIP°P»CHPSCр PrC-Cґ PeP»PsPiC-PrPsPiCґPµP»Cґ PSP°  
 P°PiCґPµPiP°C†C-Cґ C, CґPsPjP±PsC†PёC, C-PI. PґC-Pґ P»C-PeP°CґCГCHPePёPj  
 P·P°CГPsP±PsPj PґP»PhP’PґPґPґ C, P° PiPµPiP°CґPёPSPсPj PjPsPґP»PёPIP°  
 C,, P°CґPjP°PePsPrPёPSP°PjC-C±PSP° PIP·P°C”PjPsPrC-Cґ, C%Ps PjPsPґPµ  
 PiC-PrPIPёC%CrPIP°C, Pё CґPёP·PёPe CґPsP·PIPёC, PeCр PeCґPsPIPsC, PµC±. PhC, PґPµ,  
 PsPrPSPсC±P°CГPSPµ P·P°CГC, PsCГCрPIP°PSPSCґ PIPёPjP°PiP°C” PsP±PµCґPµPґPSPсCГC, C-  
 (PrPёPI. CґPsP·PrC-P» B«PhCГPsP±P»PёPIPsCГC, C- P·P°CГC, PsCГCрPIP°PSPSCґB»).

*PґCґPsPjP±PsP»C-C, PёPePё*

P’PµP·PiPµPeP° CГCрPiCрC, PSCґPsPiPs P·P°CГC, PsCГCрPIP°PSPSCґ  
 PeP»PsPiC-PrPsPiCґPµP»Cґ, C,, C-P±CґPёPSPсCГPiPµC†PёC,, C-C±PSPёC... P°P±Ps  
 C,, C-P±CґPёPSPсPSPµCГPiPµC†PёC,, C-C±PSPёC... C, CґPsPjP±PsP»C-C, PёC±PSPёC...  
 P·P°CГPsP±C-PI C, P° PiPµPiP°CґPёPSC-PI PIPёPIC±P°P»P°CГCH Cр PiP°C†C-C”PSC, C-PI P·  
 PiPsCГC, CґPёPj C-PSC,, P°CґPeC, PsPj PjC-PsPeP°CґPrP°. PґP°CГC, PsC, P° PeP»C-PSC-C±PSPс  
 P·PSP°C±CрC%PёC... PeCґPsPIPsC, PµC± P±CрP»P° P°PSP°P»PsPiC-C±PSP° C, C-PNё, C%Ps  
 CГPiPsCГC, PµCґC-PiP°P»P°CГCH Cр CґP°P·C- PsPrPSPсC±P°CГPSPсPiPs  
 P·P°CГC, PsCГCрPIP°PSPSCґ C, CґPsPjP±PsP»C-C, PёC±PSPёC... P·P°CГPsP±C-PI C-  
 PiPµPiP°CґPёPSCр P· P°C†PµC, PёP»CГP°P»C-C†PёP»PsPIPsCґ PePёCГP»PsC, PsCґ (PrPёPI.  
 CґPsP·PrC-P» B«PµPsP±C-C±PSC- CґPµP°PeC†C-C—B»). P’PµP·PiPµPeP°  
 PsPrPSPсC±P°CГPSPсPiPs P·P°CГC, PsCГCрPIP°PSPSCґ PePsPjP±C-PSP°C†C-C—  
 P°C†PµC, PёP»CГP°P»C-C†PёP»PsPIP° PePёCГP»PsC, P°/PeP»PsPiC-PrPsPiCґPµP»CH C, P°  
 C-PSCёPёC... C, CґPsPjP±PsP»C-C, PёC±PSPёC... P·P°CГPsP±C-PI PsC,, C-C†C-PNёPSPс PSPµ  
 PICГC, P°PSPсPIP°PµPSP°, C, P°PeP° PePsPjP±C-PSP°C†C-Cґ PiPsC, CґPµP±CрC”  
 PsP±PµCґPµPґPSPсCГC, C- (PrPёPI. CґPsP·PrC-P» B«PµPsP±C-C±PSC- CґPµP°PeC†C-C—B»).

*PкPµP—P—*

PµC-Pr C±P°CГ PeP»C-PSC-C±PSPсPiPs PrPsCГP»C-PrPґPµPSPSCґ, C%Ps  
 PiCґPsPIPsPrPёP»PsCГCґ P·P° CрC±P°CГC, Cґ P·PrPsCґPsPIPёC... PrPsP±CґPsPIPсP»CHC†C-PI,  
 PsPrPSPсC±P°CГPSPµ P·P°CГC, PsCГCрPIP°PSPSCґ PeP»PsPiC-PrPsPiCґPµP»Cґ C, P°  
 PSP°PiCґPsPeCГPµPSCр P·P±C-P»CHCёCрPIP°P»Ps PiCґPёC... PsPIP°PSC- PIC, CґP°C, Pё  
 PeCґPsPIC- C±PµCґPµP· CёP»CрPSPePsPIPs-PePёCёPePsPIPёPNё C, CґP°PeC, (PёPґPґ).  
 PhC, PґPµ, PsPrPSPсC±P°CГPSPµ P·P°CГC, PsCГCрPIP°PSPSCґ P· PкPµP—P—, Cр C, PsPjCр  
 C±PёCГP»C- P· C-PSPiC-P±C-C, PsCґP°PjPё P|PhP”-2, PSPµ CґPµPePsPjPµPSPрCрC”C, CHCГCґCґ  
 (PrPёPI. CґPsP·PrC-P» B«PhCГPsP±P»PёPIPsCГC, C- P·P°CГC, PsCГCрPIP°PSPSCґB»). PµCґPё  
 PsPrPSPсC±P°CГPSPсPjCр P·P°CГC, PsCГCрPIP°PSPSC- PIPёCГPsPePёC... PrPsP·  
 CГP°P»C-C†PёP»P°C, C-PI C-P· PкPµP—P— (C±PµCґPµP·  
 PIP·P°C”PjPsPiPsCГPёP»CґPIP°P»CHPSPёPNё PµC,, PµPeC,) PiC-PrPIPёC%CrC”C, CHCГCґCґ  
 CґPёP·PёPe PIPёPSPёPePSPµPSPSCґ PIPёCґP°P·PsPe C- CёP»CрPSPePsPIPs-PePёCёPePsPIPёC...  
 PeCґPsPIPsC, PµC±.

P·PeCГPiPµCґPёPjPµPSC, P°P»CHPSC- PrP°PSC- CГPIC-PrC±P°C, CH, C%Ps  
 C-P±CрPiCґPsC,, PµPS PjPsPґPµ PiCґPёPiPSC-C±CрPIP°C, Pё PrC-Cґ PSPёP·CHPePёC... PrPsP·  
 P°C†PµC, PёP»CГP°P»C-C†PёP»PsPIPsC— PePёCГP»PsC, Pё PSP° P°PiCґPµPiP°C†C-Cґ  
 C, CґPsPjP±PsC†PёC, C-PI, PePsP»Pё PIPсPSPё P·P°CГC, PsCГPsPICрCґC, CHCГCґCґ  
 PsPrPSPсC±P°CГPSPс. P’ PsPrPSPсPjCр PrPsCГP»C-PrPґPµPSPSC-, PePsP»Pё CґP°P·PsPICр  
 PrPsP·Cр C-P±CрPiCґPsC,, PµPSCр 400 PjPi P·P°CГC, PsCГPsPICрPIP°P»Pё PiCґPsC, CґPiPsPj 8

PiPsPrPëPS PrPs P°P±Ps PiCḡPsC,CḡPiPsPj 30 C...PIPëP»PëPS PiC-Cl'P»Cḡ  
P·P°Cl'C,PsCl'CfPIP°PSPSCḡ PrPsP·Pë P°C†PμC,PëP»Cl'P°P»C-C†PëP»PsPIPsC— PePëCl'P»PsC,Pë  
P·C- CëPIPëPrPePëPj PIPëPIC-P»CHPSPμPSPSCḡPj (81 PjPi), Cl'PiPsCl'C,PμCḡC-PiP°P»PsCl'Cḡ  
P·PSPëPḡPμPSPSCḡ PIPiP»PëPICr P°C†PμC,PëP»Cl'P°P»C-C†PëP»PsPIPsC— PePëCl'P»PsC,Pë  
PSP° CrC,PIPsCḡPμPSPSCḡ C,CḡPsPjP±PsPeCl'P°PSCr P°P±Ps P°PiCḡPμPiP°C†C-CH  
C,CḡPsPjP±PsC†PëC,C-PI. PμCḡPsC,Pμ PsP±PjPμPḡPμPSPSCḡ C†PëC... PrP°PSPëC..., P°  
C,P°PePsPḡ Cl'C,P°C,PëCl'C,PëC†PSP° PSPμPrPsCl'C,PsPIC-CḡPSC-Cl'C,CH C°PsPrPs  
PμPeCl'C,CḡP°PiPsP»CḡC†C-C— PrP°PSPëC..., PsC,CḡPëPjP°PSPëC... ex vivo, PSP°  
PeP»C-PSC-C†PSC- PIPëPiP°PrPePë Cl'PIC-PrC†P°C,CH PiCḡPs C,Pμ, C°Ps PSPμ PjPsPḡPSP°  
P·CḡPsP±PëC,Pë PsPrPSPsP·PSP°C†PSPëC... PIPëCl'PSPsPIPeC-PI C°PsPrPs  
CḡPμPiCfP»CḡCḡPSPsPiPs P·P°Cl'C,PsCl'CfPIP°PSPSCḡ C-P±CrPiCḡPsC,,PμPSCr; Cr CḡP°P·C-  
Cl'PëC,CrP°C,PëPIPSPsPiPs P·P°Cl'C,PsCl'CfPIP°PSPSCḡ C-P±CrPiCḡPsC,,PμPSCr  
PIPëPSPëPePSPμPSPSCḡ PeP»C-PSC-C†PSPs P·PSP°C†PëPjPsPiPs PμC,,PμPeC,Cr  
PjP°P»PsPNëPjPsPIC-CḡPSPμ.

*PŸPμP»PμPeC,PëPIPSC- C-PSPiC-P±C-C,PsCḡPë P·PIPsCḡPsC,PSPsPiPs P·P°C...PsPiP»PμPSPSCḡ  
Cl'PμCḡPsC,PsPSC-PSCž (PŸP†P—P—PŸ)*

PŸP†P—P—PŸ PIPiP»PëPIP°CHC,CH PSP° P°PeC,PëPIP°C†C-CH C,CḡPsPjP±PsC†PëC,C-PI C,P°  
PiC-PrPIPëC°CrCHC,CH CḡPëP·PëPe PIPëPSPëPePSPμPSPSCḡ PeCḡPsPIPsC,PμC†, C,PsPjCr  
P·P°Cl'C,PsCl'PsPICrPIP°C,Pë PŸP†P—P—PŸ PsPrPSPsC†P°Cl'PSPs P·  
PeP»PsPiC-PrPsPiCḡPμP»PμPj Cl'P»C-Pr P· PsP±PμCḡPμPḡPSC-Cl'C,CH.

*PḡPμC,P°PjC-P·PsP»*

PμCḡPë PsPrPSPsC†P°Cl'PSPsPjCr P·P°Cl'C,PsCl'CfPIP°PSPSC- P·  
P°C†PμC,PëP»Cl'P°P»C-C†PëP»PsPIPsCḡ PePëCl'P»PsC,PsCḡ PjPμC,P°PjC-P·PsP» PjPsPḡPμ  
P·PjPμPSC€CrPIP°C,Pë PIPiP»PëPI P°C†PμC,PëP»Cl'P°P»C-C†PëP»PsPIPsC— PePëCl'P»PsC,Pë  
PSP° P°PiCḡPμPiP°C†C-CH C,CḡPsPjP±PsC†PëC,C-PI. Pj P·PiBḡ™ CḡP·PeCr C-P· C†PëPj C,P°PeCr  
PePsPjP±C-PSP°C†C-CH Cl'P»C-Pr PiCḡPëP·PSP°C†P°C,Pë P· PsP±PμCḡPμPḡPSC-Cl'C,CH  
PiP°C†C-C"°PSC,P°Pj, CḡPeC- PiCḡPëPNëPjP°CHC,CH PSPëP·CHPeC- PrPsP·Pë  
P°C†PμC,PëP»Cl'P°P»C-C†PëP»PsPIPsC— PePëCl'P»PsC,Pë P· PjPμC,PsCḡ  
PrPsCl'CḡPiPSPμPSPSCḡ PeP°CḡPrC-PsPiCḡPsC,PμPeC,PëPIPSPsPiPs PμC,,PμPeC,Cr.

*P†PSC€C- P»C-PeP°CḡCl'CHPeC- P·P°Cl'PsP±Pë, C°Ps P·P°Cl'C,PsCl'PsPICžCHC,CHCl'Cḡ  
CḡP°P·PsPj P· PeP»PsPiC-PrPsPiCḡPμP»PμPj*

P†PSPrCrPeC,PsCḡPë CYP2PŸ19

PḡCl'PeC-P»CHPePë PjPμC,P°P±PsP»C-P·Pj PeP»PsPiC-PrPsPiCḡPμP»CH PI P°PeC,PëPIPSPëPNë  
PjPμC,P°P±PsP»C-C, PIC-PrP±CrPIP°C"°C,CHCl'Cḡ C†P°Cl'C,PePsPIPs P·P° PrPsPiPsPjPsPiPsCH  
CYP2PŸ19, P·P°Cl'C,PsCl'CfPIP°PSPSCḡ P»C-PeP°CḡCl'CHPePëC... P·P°Cl'PsP±C-PI, CḡPeC-  
PiCḡPëPiPSC-C†CrCHC,CH P°PeC,PëPIPSC-Cl'C,CH C†CHPsPiPs C,,PμCḡPjPμPSC,Cr,  
PIC-CḡPsPiC-PrPSPs, PiCḡPëP·PIPsPrPëC,CH PrPs P·PSPëPḡPμPSPSCḡ CḡC-PIPSCḡ  
P°PeC,PëPIPSPsPiPs PjPμC,P°P±PsP»C-C,Cr PeP»PsPiC-PrPsPiCḡPμP»CH. PḡP»C-PSC-C†PSP°  
P·PSP°C†PëPjC-Cl'C,CH C,P°PePsC— PIP·P°C"°PjPsPrC-C— PSPμ PIPëP·PSP°C†PμPSP°.

P PëC,,P°PjPiC-C†PëPS Bḡ“ PiPsC,CrPḡPSPëPNë C-PSPrCrPeC,PsCḡ CYP2PŸ19, C°Ps  
PiCḡPëP·PIPsPrPëC,CH CḡPe PrPs PiC-PrPIPëC°PμPSPSCḡ CḡC-PIPSCḡ P°PeC,PëPIPSPsPiPs  
PjPμC,P°P±PsP»C-C,Cr PeP»PsPiC-PrPsPiCḡPμP»CH, C,P°Pe C- PrPs PiCḡPëPiPSC-C†PμPSPSCḡ  
C,CḡPsPjP±PsC†PëC,C-PI, C°Ps, P·PsPeCḡPμPjP°, PjPsPḡPμ PiPsCl'PëP»PëC,Pë CḡPëP·PëPe  
PeCḡPsPIPsC,PμC†C-. PiPe PiPsC,CrPḡPSPëPNë P·P°C...C-Pr, CḡPμPePsPjPμPSPrCrC"°C,CHCl'Cḡ

СрPSPëPeP°C, Pë CГPиC-P»CHbPSPsPiPs P·P°CГC, PsCГCГPIP°PSPSCЦ PиPsC, CГP¶PSPëC...  
C-PSPrCГPeC, PsCГC-PI CYP2PŸ19 (PrPëPI. CГPsP·PrC-P» B«PhCГPsP±P»PëIPsCГC, C-  
P·P°CГC, PsCГCГPIP°PSPSCЦB»).

P†PSPiC-P±C-C, PsCГPë CYP2PŸ19

PhCГPeC-P»CHbPePë PjPµC, P°P±PsP»C-P·Pj PeP»PsPiC-PrPsPiCГPµP»CГ PI P°PeC, PëPIPSPëPNë  
PjPµC, P°P±PsP»C-C, PIC-PrP±CГPIP°C"C, CHbCГCЦ C†P°CГC, PePsPiPs P·P° PrPsPiPsPjPsPiPsCГ  
CYP2PŸ19, P·P°CГC, PsCГCГPIP°PSPSCЦ P»C-PeP°CГCГCHbPePëC... P·P°CГPsP±C-PI, C%Ps  
C-PSPiC-P±CГCГC, CHb P°PeC, PëPIPSC-CГC, CHb C†CHbPsPiPs C,, PµCГPjPµPSC, CГ,  
PIC-CГPsPiC-PrPSPs, PiCГPëP·PiPsPrPëC, CHb PrPs P·PjPµPSC€PµPSPSCЦ CГC-PIPSЦ  
P°PeC, PëPIPSPsPiPs PjPµC, P°P±PsP»C-C, CГ PeP»PsPiC-PrPsPiCГPµP»CГ. PµP»C-PSC-C†PSP°  
P·PSP°C†PëPjC-CГC, CHb C, P°PePsC— PIP·P°C"PjPsPrC-C— PSPµ PIPëP·PSP°C†PµPSP°. PŸP»C-Pr  
CГPSPëPeP°C, Pë PsPrPSPsC†P°CГPSPsPiPs P·P°CГC, PsCГCГPIP°PSPSCЦ  
P»C-PeP°CГCГCHbPePëC... P·P°CГPsP±C-PI, CЦPeC- CГPëP»CHbPSPs P°P±Ps PiPsPjC-CГPSPs  
PiCГPëPiPSC-C†CГCГC, CHb P°PeC, PëPIPSC-CГC, CHb CYP2PŸ19 (PrPëPI. CГPsP·PrC-P»Pë  
B«P°P°CГPjP°PePsPeC-PSPrC, PëPeP°B» C, P° B«PhCГPsP±P»PëIPsCГC, C-  
P·P°CГC, PsCГCГPIP°PSPSCЦB»).

P"Ps P»C-PeP°CГCГCHbPePëC... P·P°CГPsP±C-PI, C%Ps PSP°P»PµP¶P°C, CHb PrPs  
CГPëP»CHbPSPëC... P°P±Ps PiPsPjC-CГPSPëC... C-PSPiC-P±C-C, PsCГC-PI CYP2PŸ19,  
PSP°P»PµP¶P°C, CHb PsPjPµPiCГP°P·PsP» C, P° PµP·PsPjPµPiCГP°P·PsP»,  
C,, P»CГPiPsPeCГP°PjC-PS, C,, P»CГPsPeCГPµC, PëPS, PjPsPeP»PsP±PµPjC-Pr,  
PiPsCГPëPePsPSP°P·PsP», C,, P»CГPePsPSP°P·PsP», C, PëPeP»PsPiC-PrPëPS,  
PeP°CГP±P°PjP°P·PµPiC-PS, PµC,, P°PIC-CГPµPSC†.

*P†PSPiC-P±C-C, PsCГPë PiCГPsC, PsPSPSPsC— PiPsPjPiPë*

P—P°CГC, PsCГCГPIP°PSPSCЦ PsPjPµPiCГP°P·PsP»CГ 80 PjPi 1 CГP°P· PSP° PrPsP±CГ,  
CЦPePëPNë PiCГPëP·PSP°C†P°PICГCЦ P°P±Ps CГ C, PsPNë P¶Pµ C†P°CГ, C%Ps C-  
PeP»PsPiC-PrPsPiCГPµP»CHb, P°P±Ps P· C-PSC, PµCГPIP°P»PsPj CГ 12 PiPsPrPëPS PjC-P¶  
P·P°CГC, PsCГCГPIP°PSPSCЦPj C†PëC... PrPiPsC... PiCГPµPiP°CГP°C, C-PI, P·PjPµPSC€CГPIP°P»Ps  
PµPeCГPiPsP·PëC†C-CГ P°PeC, PëPIPSPsPiPs PjPµC, P°P±PsP»C-C, CГ PSP° 45 % (PiC-CГP»CЦ  
P·P°CГC, PsCГCГPIP°PSPSCЦ PSP°PIP°PSC, P°P¶CГPIP°P»CHbPSPsC— PrPsP·Pë) C- PSP° 40 %  
(PSP° C,, PsPSC- P·P°CГC, PsCГCГPIP°PSPSCЦ PiC-PrC, CГPëPjCГCГC†PsC— PrPsP·Pë). PiPµ  
P·PSPëP¶PµPSPSCЦ PµPeCГPiPsP·PëC†C-C— CГCГPiCГPsPiPsPrP¶CГPIP°P»PsCГCЦ  
P·PjPµPSC€PµPSPSCЦPj C-PSPiC-P±CГPIP°PSPSCЦ P°PiCГPµPiP°C†C-C—  
C, CГPsPjP±PsC†PëC, C-PI PSP° 39 % (PiC-CГP»CЦ P·P°CГC, PsCГCГPIP°PSPSCЦ  
PSP°PIP°PSC, P°P¶CГPIP°P»CHbPSPsC— PrPsP·Pë) C- PSP° 21 % (PSP° C,, PsPSC-  
P·P°CГC, PsCГCГPIP°PSPSCЦ PiC-PrC, CГPëPjCГCГC†PsC— PrPsP·Pë). PhC†C-PeCГC"C, CHbCГCЦ,  
C%Ps PµP·PsPjPµPiCГP°P·PsP» P±CГPrPµ PICГC, CГPiP°C, Pë P· PeP»PsPiC-PrPsPiCГPµP»PµPj CГ  
PiPsPrC-P±PSCГ PIP·P°C"PjPsPrC-CГ.

P' PsP±CГPµCГPIP°C†C-PNëPSPëC... C, P° PeP»C-PSC-C†PSPëC... PrPsCГP»C-PrP¶PµPSPSCЦC...  
PsC, CГPëPjP°PSPs CГCГPiPµCГPµC†P»PëPIC- PrP°PSC- C%PsPrPs PeP»C-PSC-C†PSPsC—  
P·PSP°C†CГC%PsCГC, C- C†C-C"C—  
C,, P°CГPjP°PePsPeC-PSPrC, PëC†PSPsC—/C,, P°CГPjP°PePsPrPëPSP°PjC-C†PSPsC—  
PIP·P°C"PjPsPrC-C— PrP»CЦ CГPëP·PëPeCГ CГPsP·PiPëC, PeCГ CГPµCГPNëPsP·PSPëC...  
CГPµCГC†PµPiPs-CГCГPrPëPSPSPëC... PiPsPrC-PNë. PiPe P·P°PiPsP±C-P¶PSPëPNë P·P°C...C-Pr  
PsPrPSPsC†P°CГPSPsPiPs P·P°CГC, PsCГCГPIP°PSPSCЦ PsPjPµPiCГP°P·PsP»CГ P°P±Ps  
PµP·PsPjPµPiCГP°P·PsP»CГ CГPµPePsPjPµPSPrCГC"C, CHbCГCЦ CГPSPëPeP°C, Pë (PrPëPI.  
CГPsP·PrC-P» B«PhCГPsP±P»PëIPsCГC, C- P·P°CГC, PsCГCГPIP°PSPSCЦB»).

$$\begin{aligned} & \text{P}\bar{\text{K}}\text{P}\mu \quad \text{C}\dot{\Gamma}\text{P}\bar{\text{i}}\text{PsC}\dot{\Gamma}\text{C}, \text{P}\mu\text{C}\dot{\text{T}}\text{C}-\text{PiP}^{\circ}\text{P} \gg \text{PsC}\dot{\Gamma}\text{C}\dot{\text{U}} \quad \text{PeP} \gg \text{C}-\text{PSC}-\text{C}\ddagger\text{PSPs} \quad \text{P}\cdot\text{PSP}^{\circ}\text{C}\ddagger\text{P}\bar{\text{e}}\text{PjPsC}- \\ & \text{C}_{..}\text{P}^{\circ}\text{C}\dot{\text{T}}\text{PjP}^{\circ}\text{PePsPrP}\bar{\text{e}}\text{PSP}^{\circ}\text{PjC}-\text{C}\ddagger\text{PSPsC}-\quad \text{PIP}\cdot\text{P}^{\circ}\text{C}''\text{PjPsPrC}-\text{C}-\quad \text{PiC}-\text{Pr} \quad \text{C}\ddagger\text{P}^{\circ}\text{C}\dot{\Gamma} \\ & \text{PsPrPSPsC}\ddagger\text{P}^{\circ}\text{C}\dot{\Gamma}\text{PSPsPiPs} \quad \text{P}\cdot\text{P}^{\circ}\text{C}\dot{\Gamma}\text{C}, \text{PsC}\dot{\Gamma}\text{C}\dot{\Gamma}\text{PIP}^{\circ}\text{PSPSC}\dot{\text{U}} \quad \text{PeP} \gg \text{PsPiC}-\text{PrPsPiC}\dot{\text{T}}\text{P}\mu\text{P} \gg \text{C}\dot{\text{T}} \quad \text{C}, \text{P}^{\circ} \\ & \text{P}^{\circ}\text{C}, \text{P}\mu\text{PSPsP} \gg \text{PsP} \gg \text{Cr}, \quad \text{PSC}-\text{C}_{..}\text{P}\mu\text{PrP}\bar{\text{e}}\text{PiC}-\text{PSCr} \quad \text{P}^{\circ}\text{P}\pm\text{Ps} \quad \text{P}^{\circ}\text{C}, \text{P}\mu\text{PSPsP} \gg \text{PsP} \gg \text{Cr} \quad \text{C}, \text{P}^{\circ} \end{aligned}$$

PSC-C,,PμPrPëPīC-PSCř. P'C-P»CHC€Pμ C,PsPiPs, PsPrPSPsC‡P°CřPSPμ  
P·P°CřC,PsCřCřPIP°PSPSCı C,,PμPSPsP±P°CřP±C-C,P°P»Cř P°P±Ps PμCřC,CřPsPiPμPSCř PSPμ  
PjP°C" CřCřC,C,C"PIPsPiPs PIPiP»PëPICř PSP° C,,P°CřPjP°PePsPrPëPSP°PjC-C‡PSCř  
P°PeC,PëPIPSC-CřC,CH PeP»PsPiC-PrPsPiCřPμP»CH.

PαP°CřPjP°PePsPeC-PSPμC,PëC‡PSC- PīPsPeP°P·PSPëPePë PrPëPiPsPeCřPëPSCř P°P±Ps  
C,PμPsC,,C-P»C-PSCř PSPμ P·PjC-PSCřPIP°P»PëCřCH Cř CřP°P·C- C—C...  
PsPrPSPsC‡P°CřPSPsPiPs P·P°CřC,PsCřCřPIP°PSPSCı P· PeP»PsPiC-PrPsPiCřPμP»PμPj.  
PhPSC,P°C‡PëPrPSC- P·P°CřPsP±Pë PSPμ P·PjPμPSC€CřPIP°P»Pë P°P±CřPsCřP±C‡C-CH  
PeP»PsPiC-PrPsPiCřPμP»CH.

P"°PSC-, PsPrPμCřP¶P°PSC- PI C...PsPrC- PrPsCřP»C-PrP¶PμPSCř P·  
PjC-PeCřPsCřPsPjP°PjPë PīPμC‡C-PSPePë P»CHPrPëPSPë, CřPIC-PrC‡P°C,CH PīCřPs C,Pμ,  
C%Ps PeP°CřP±PsPeCřPëP»CHPSPëPNë PjPμC,P°P±PsP»C-C, PeP»PsPiC-PrPsPiCřPμP»CH  
PjPsP¶Pμ PīCřPëPiPSC-C‡CřPIP°C,Pë P°PeC,PëPIPSC-CřC,CH C‡PëC,PsC...CřPsPjCř P 4502PŸ9.  
PīPμ PīPsC,PμPSC‡C-PNëPSPs PjPsP¶Pμ PīCřPëP·PIPsPrPëC,Pë PrPs PīC-PrPIPëC%PμPSPSCı Cř  
PīP»P°P·PjC- PeCřPsPIC- PePsPSC‡PμPSC,CřP°C‡C-C— PrPμCıPePëC...  
P»C-PeP°CřCřCHPePëC... P·P°CřPsP±C-PI, C,P°PePëC... CıPe C,,PμPSC-C,PsC—PS C,P°  
C,PsP»P±CřC,P°PjC-Pr, P° C,P°PePsP¶ PıPμP—P—, CıPeC- PjPμC,P°P±PsP»C-P·CřCHC,CHCřCı  
P·P° PrPsPīPsPjPsPiPsCH C‡PëC,PsC...CřPsPjCř P 4502PŸ9. P"°PSC- PrPsCřP»C-PrP¶PμPSPSCı  
PŸPhP RIE CřPIC-PrC‡P°C,CH PīCřPs C,Pμ, C%Ps PsPrPSPsC‡P°CřPSPμ  
P·P°CřC,PsCřPsPICřPIP°PSPSCı C,,PμPSC-C,PsC—PSCř C,P° C,PsP»P±CřC,P°PjC-PrCř P·  
PeP»PsPiC-PrPsPiCřPμP»PμPj C" P±PμP·PīPμC‡PSPëPj.

*P>C-PeP°CřCřCHPeC- P·P°CřPsP±Pë, CřC‡P±CřC,CřP°C,PsPj CıPePëC... C" CYP2C8*

PμC-Pr C‡P°Cř PrPsCřP»C-PrP¶PμPSPSCı PSP° P·PrPsCřPsPIPëC...  
PrPsP±CřPsPiPsP»CHC‡CıC... PīCřPëP·PSP°C‡PμPSPSCı PeP»PsPiC-PrPsPiCřPμP»CH  
PīCřPëP·PIPμP»Ps PrPs PīC-PrPIPëC%PμPSPSCı PIPëPIC-P»CHPSPμPSPSCı  
CřPμPīP°PiP»C-PSC-PrCř. P"PsCřP»C-PrP¶PμPSPSCı *in vitro* PīPsPeP°P·P°P»Pë  
PīC-PrPIPëC%PμPSPSCı PμPeCřPīPsP·PëC‡C-C— CřPμPīP°PiP»C-PSC-PrCř P·P°  
CřP°C...CřPSPsPe PīCřPëPiPSC-C‡PμPSPSCı CYP2C8 PīP»CHPeCřCřPsPSC-PrPSPëPj  
PjPμC,P°P±PsP»C-C,PsPj PeP»PsPiC-PrPsPiCřPμP»CH. P§PμCřPμP· CřPëP·PëPe  
P·P±C-P»CHC€PμPSPSCı PePsPSC‡PμPSC,CřP°C‡C-PNë PI PīP»P°P·PjC- PeCřPsPIC-, CřP»C-Pr  
P· PsP±PμCřPμP¶PSC-CřC,CH PīCřPëP·PSP°C‡P°C,Pë PsPrPSPsC‡P°CřPSPs  
PeP»PsPiC-PrPsPiCřPμP»CH C- P»C-PeP°CřCřCHPeC- P·P°CřPsP±Pë, CıPeC- Cř PīPμCřC€Cř  
C‡PμCřPiCř PIPëPIPsPrCıC,CHCřCı P·P° CřP°C...CřPSPsPe PjPμC,P°P±PsP»C-P·PjCř CYP2C8  
(PSP°PīCřPëPeP»P°Pr, CřPμPīP°PiP»C-PSC-Pr, PīP°PeP»C-C,P°PeCřPμP») (PrPëPI. CřPsP·PrC-P»  
B«PhCřPsP±P»PëPIPsCřC,C- P·P°CřC,PsCřCřPIP°PSPSCıB»).

*P PsP·C‡PIP°CřC,P°C,PëPS*

P'CřP»Ps PīPsPeP°P·P°PSPs, C%Ps PeP»PsPiC-PrPsPiCřPμP»CH P·P±C-P»CHC€CřC"  
PμPeCřPīPsP·PëC‡C-CH CřPsP·CřPIP°CřC,P°C,PëPSCř Cř PīP°C‡C-C"°PSC,C-PI PI 1,4 CřP°P·Pë  
(AUC) P±PμP· PIPiP»PëPICř PSP° PŸmax PīC-CřP»Cı PīPsPIC,PsCřPSPsPiPs PīCřPëPNëPsPjCř  
PeP»PsPiC-PrPsPiCřPμP»CH PI PrPsP·C- 75 PjPi.

*P‡PSC€C- P»C-PeP°CřCřCHPeC- P·P°CřPsP±Pë, C%Ps P·P°CřC,PsCřPsPIC‡CHC,CHCřCı  
PsPrPSPsC‡P°CřPSPs P· P°C‡PμC,PëP»CřP°P»C-C‡PëP»PsPIPsCH PePëCřP»PsC,PsCH*

PjCřPëPePsP·CřCřPëC‡PSC- P·P°CřPsP±Pë (P±PμPSP·PsPiCřPsPjP°CřPsPS,  
PīCřPsP±PμPSPμC‡PëPr, CřCřP»CHC,,C-PSPiC-CřP°P·PsPS) CřP»C-Pr







PhP»PePsPiPsP»CH CÍPíCĤPëCĬC” PíPsC€PePsPrP¶PµPSPSCĤ CÍP»PëP·PsPIPsC—  
PsP±PsP»PsPSPePë PËPŕPŕ C- PíCĤPsP»PsPSPiCíC” C‡P°CÍ PeCĤPsPIPsC,PµC‡C-  
PIPSP°CÍP»C-PrPsPe CÍPëPSPµCĤPiC-P·PjCí P°C‡PµC,PëP»CÍP°P»C-C‡PëP»PsPIPsC—  
PePëCÍP»PsC,Pë C- P°P»PePsPiPsP»CĤ. PµP°C‡C-C”PSC,P°Pj CÍP»C-Pr PíPsPIC-PrPsPjPëC,Pë  
PíCĤPs CĤPëP·PëPe PíPsC€PePsPrP¶PµPSPSCĬ PsP±PsP»PsPSPePë PËPŕPŕ C-  
PeCĤPsPIPsC,PµC‡C- PíCĤPë PsPrPSPSc‡P°CÍPSPsPjCí P·P°CÍC,PsCÍCíPIP°PSPSC-  
P»C-PeP°CĤCÍCHPePsPiPs P·P°CÍPsP±Cí P· P°P»PePsPiPsP»PµPj, PsCÍPsP±P»PëPIPs  
CĬPeC%oPs PIP¶PëPIP°PSPSCĬ P°P»PePsPiPsP»CĤ C” C...CĤPsPSC-C‡PSPëPj C‡Pë  
P·PSP°C‡PSPëPj (PrPëPI. CĤPsP·PrC-P» B«PhCÍPsP±P»PëPIPsCÍC,C-  
P·P°CÍC,PsCÍCíPIP°PSPSCĬB»).

P”C-CíCĤPµC,PëC‡PSC- P·P°CÍPsP±Pë PI PePsPjP±C-PSP°C‡C-C— P· PIPëCÍPsPePëPjPë  
PrPsP·P°PjPë P°C‡PµC,PëP»CÍP°P»C-C‡PëP»PsPIPsC— PePëCÍP»PsC,Pë P·PSPëP¶CíCĤC,CH  
PeP»CíP±PsC‡PePsPICí C,,C-P»CHC,CĤP°C‡C-CĤ P·P°PIPrCĬPePë P·PSPëP¶PµPSPSCĤ  
CÍPëPSC,PµP·Cí PíCĤPsCÍC,P°PiP»P°PSPPrPëPSC-PI Cí PSPëCĤPeP°C....

*P†PSC€C- PIPëPrPë PIP·P°C”PjPsPrC-C— P· PeP»PsPíC-PrPsPiCĤPµP»PµPj C,P°  
P°C‡PµC,PëP»CÍP°P»C-C‡PëP»PsPIPsCĤ PePëCÍP»PsC,PsCĤ*

P’C-P»CHC€Pµ PSC-P¶ 30000 PíP°C‡C-C”PSC,C-PI P±CĤP°P»Pë CíC‡P°CÍC,CH Cí  
PeP»C-PSC-C‡PSPëC... PIPëPíCĤPsP±CíPIP°PSPSCĬC... PePsPjP±C-PSP°C‡C-C—  
PeP»PsPíC-PrPsPiCĤPµP»CĤ P· P°C‡PµC,PëP»CÍP°P»C-C‡PëP»PsPIPsCĤ PePëCÍP»PsC,PsCĤ Cí  
PíC-PrC,CĤPëPjCíCĤC‡PëC... PrPsP·P°C..., CĬPeC- PSPµ PíPµCĤPµPIPëC%oCíPIP°P»Pë 325 PjPi,  
C- PsC,CĤPëPjCíPIP°P»Pë CĤC-P·PSPsPjP°PSC-C,PSC- CÍCíPíCíC,PSC- P»C-PeP°CĤCÍCHPeC-  
P·P°CÍPsP±Pë, Cí C,PsPjCí C‡PëCÍP»C- PrC-CíCĤPµC,PëPePë, P±PµC,P°-  
P°PrCĤPµPSPsP±P»PsPeP°C,PsCĤPë, C-PSPiC-P±C-C,PsCĤPë PhPµPα, P°PSC,P°PiPsPSC-CÍC,Pë  
PeP°P»CHC‡C-CĤ, C...PsP»PµCÍC,PµCĤPëPSP·PSPëP¶CíCĤC‡C- P·P°CÍPsP±Pë,  
PePsCĤPsPSP°CĤPSC- PIP°P·PsPrPëP»P°C,PsCĤPë, PíCĤPsC,PëPrC-P°P±PµC,PëC‡PSC-  
PíCĤPµPíP°CĤP°C,Pë (PIPeP»CĤC‡P°CĤC‡Pë C-PSCÍCíP»C-PS),  
PíCĤPsC,PëPµPíC-P»PµPíC,PëC‡PSC- P·P°CÍPsP±Pë C,P° P°PSC,P°PiPsPSC-CÍC,Pë  
PiP»C-PePsPíCĤPsC,PµC—PSPsPIPëC... CĤPµC‡PµPíC,PsCĤC-PI P†P†b/P†P†P†P°, P±PµP·  
PsP·PSP°Pe PeP»C-PSC-C‡PSPs P·PSP°C‡PëPjPsC— PSPµCÍPíCĤPëCĬC,P»PëPIPsC—  
PIP·P°C”PjPsPrC-C—.

PhPeCĤC-Pj C-PSC,,PsCĤPjP°C‡C-C— C%oPsPrPs PIP·P°C”PjPsPrC-C— P· PsPeCĤPµPjPëPjPë  
P»C-PeP°CĤCÍCHPePëPjPë P·P°CÍPsP±P°PjPë, CĬPeCí PSP°PIPµPrPµPSPs PIPëC%oPµ,  
PrP°PSPëC... PíCĤPs PIP·P°C”PjPsPrC-CĤ PePsPjP±C-PSP°C‡C-C—  
P°C‡PµC,PëP»CÍP°P»C-C‡PëP»PsPIP° PePëCÍP»PsC,P°/PeP»PsPíC-PrPsPiCĤPµP»CH P·  
PrPµCĬPePëPjPë C€PëCĤPsPePs P·P°CÍC,PsCÍPsPICíPIP°PSPëPjPë P»C-PeP°CĤCÍCHPePëPjPë  
P·P°CÍPsP±P°PjPë, C%oPs PíCĤPëP·PSP°C‡P°CĤC,CHCÍCĬ PíP°C‡C-C”PSC,P°Pj P·  
P°C,PµCĤPsC,CĤPsPjP±PsC,PëC‡PSPsCĤ C...PIPsCĤPsP±PsCĤ, PSPµPjP°C”, PsCÍPeC-P»CHPePë  
PrPsCÍP»C-PrP¶PµPSPSCĬ PSPµ PíCĤPsPIPsPrPëP»PëCÍCĬ.

PíPe C- P· C-PSC€PëPjPë PíPµCĤPsCĤP°P»CHPSPëPjPë C-PSPiC-P±C-C,PsCĤP°PjPë P2Y12,  
CÍPíC-P»CHPSPµ PIPµPrPµPSPSCĬ P°PiPsPSC-CÍC,C-PI PsPíC-PsC—PrC-PI PjPsP¶Pµ  
P·P°C,CĤPëPjCíPIP°C,Pë C,P° P·PjPµPSC€CíPIP°C,Pë P°P±CÍPsCĤP±C‡C-CĤ  
PeP»PsPíC-PrPsPiCĤPµP»CĤ, PŕPjPsPIC-CĤPSPs, C‡PµCĤPµP· CÍPíPsPIC-P»CHPSPµPSPµ  
PIPëPíPsCĤPsP¶PSPµPSPSCĬ C€P»CíPSPeP°. PŕP»C-PSC-C‡PSP° P·PSP°C‡CíC%oC-CÍC,CH  
PSPµPIC-PrPsPjP°. PŕP»C-Pr CĤPsP·PiP»CĬPSCíC,Pë PrPsC‡C-P»CHPSC-CÍC,CH  
P·P°CÍC,PsCÍCíPIP°PSPSCĬ PíP°CĤPµPSC,PµCĤP°P»CHPSPsPiPs  
P°PSC,PëC,CĤPsPjP±PsC,PëC‡PSPsPiPs P·P°CÍPsP±Cí PíP°C‡C-C”PSC,P°Pj P· PiPsCÍC,CĤPëPj  
PePsCĤPsPSP°CĤPSPëPj CÍPëPSPPrCĤPsPjPsPj, CĬPeC- PíPsC,CĤPµP±CíCĤC,CH

PsPrPSPsC±P°CÍPSPsPiPs PIPµPrPµPSPSCΠ PjPsCḡC,,C-PSCÍ P°P±Ps C-PSC€PëC...  
P°PiPsPSC-CÍC,C-PI PsPiC-PsC—PrC-PI.

***PhCÍPsP±P»PëPIPsCÍC,C- P·P°CÍC,PsCÍC¿PIP°PSPSCΠ.***

*PḡCḡPsPIPsC,PµC±C- C,P° PiPµPjP°C,PsP»PsPiC-C±PSC- CḡPsP·P»P°PrPë*

Pj P·PIbḡ™ CΠP·PeCÍ P· CḡPëP·PëPePsPj CḡPsP·PIPëC,PeCÍ PeCḡPsPIPsC,PµC±C- C,P°  
PiPµPjP°C,PsP»PsPiC-C±PSPëC... PiPsP±C-C±PSPëC... CḡPµP°PeC†C-PNḡ PiCḡPë PiPsCΠPIC- PI  
C...PsPrC- P»C-PeCÍPIP°PSPSCΠ PeP»C-PSC-C±PSPëC... CÍPëPjPiC,PSPjC-PI, C%oPs  
P°CÍPsC†C-CḡCḡC,CHCÍCΠ P· PIPëPSPëPePSPµPSPSCΠPj PeCḡPsPIPsC,PµC±C-, CÍP»C-Pr  
C,PµCḡPjC-PSPsPIPs P·CḡPsP±PëC,Pë PeP»C-PSC-C±PSPëPNḡ P°PSP°P»C-P· PeCḡPsPIC-  
C,P°/P°P±Ps PiCḡPsPIPµCÍC,Pë PePsPSC,CḡPsP»CH C-PSC€PëC... PIC-PrPiPsPIC-PrPSPëC...  
PiPsPeP°P·PSPëPeC-PI (PrPëPI. CḡPsP·PrC-P» B«PµPsP±C-C±PSC- CḡPµP°PeC†C-C—B»).

PhCÍPeC-P»CHPePë P»C-PeP°CḡCÍCHPePëPNḡ P·P°CÍC-P± PḡP»PhP'PhPŸPḡ C"  
P°PSC,PëC,CḡPsPjP±PsC,PëC±PSPëPj PiCḡPµPiP°CḡP°C,PsPj, PrPs CÍPeP»P°PrCÍ CΠPePsPiPs  
PIC...PsPrCΠC,CH PrPIC- PrC-CḡC±C- CḡPµC±PsPIPëPSPë, PNḡPsPiPs CÍP»C-Pr  
P·P°CÍC,PsCÍPsPICÍPIP°C,Pë P· PsP±PµCḡPµP¶PSC-CÍC,Cḡ PiP°C†C-C" PSC,P°Pj, CΠPeC-  
PjP°CḡC,CH PiC-PrPIPëC%oPµPSPëPNḡ CḡPëP·PëPe CḡPsP·PIPëC,PeCÍ PeCḡPsPIPsC,PµC±C-,  
PiPsPIbḡ™ CΠP·P°PSPëPNḡ P· C,CḡP°PIPjP°PjPë, C...C-CḡCÍCḡPiC-C±PSPëPj  
PIC,CḡCÍC†P°PSPSCΠPj P°P±Ps C-PSC€PëPjPë PiP°C,PsP»PsPiC-C±PSPëPjPë CÍC,P°PSP°PjPë, P°  
C,P°PePsP¶ CÍ CḡP°P·C- P·P°CÍC,PsCÍCÍPIP°PSPSCΠ PI PePsPjP±C-PSPsPIP°PSC-PNḡ  
C,PµCḡP°PiC-C— P· C-PSC€PëPjPë PkPµP—P—, CÍ C,PsPjCÍ C±PëCÍP»C- P·  
C-PSPiC-P±C-C,PsCḡP°PjPë PiPhP"-2, PiPµPiP°CḡPëPSPsPj, C-PSPiC-P±C-C,PsCḡP°PjPë  
PiP»C-PePsPiCḡPsC,PµC—PSPsPIPëC... CḡPµC†PµPiC,PsCḡC-PI P†P†b/P†P†P†P°, PŸP†P—P—PŸ,  
PiPsC,CÍP¶PSPëPjPë C-PSPrCÍPeC,PsCḡP°PjPë CYP2C19, C,CḡPsPjP±PsP»C-C,PëPeP°PjPë  
P°P±Ps C-PSC€PëPjPë P»C-PeP°CḡCÍCHPePëPjPë P·P°CÍPsP±P°PjPë, CΠPeC-  
PiC-PrPIPëC%oCÍCḡC,CH CḡPëP·PëPe CḡPsP·PIPëC,PeCÍ PeCḡPsPIPsC,PµC±C-, C,P°PePëPjPë  
CΠPe PiPµPSC,PsPeCÍPëC,,C-P»C-PS (PrPëPI. CḡPsP·PrC-P» B«P'P·P°C" PjPsPrC-CΠ P·  
C-PSC€PëPjPë P»C-PeP°CḡCÍCHPePëPjPë P·P°CÍPsP±P°PjPë C,P° C-PSC€C- PIPëPrPë  
PIP·P°C" PjPsPrC-PNḡB»).

PkPµPsP±C...C-PrPSPs PIPµCÍC,Pë CḡPµC,PµP»CHPSPµ  
CÍPiPsCÍC,PµCḡPµP¶PµPSPSCΠ P·P° CÍC,P°PSPsPj PiP°C†C-C" PSC,C-PI P· PjPµC,PsCḡ  
PIPëCΠIP»PµPSPSCΠ P±CÍPrCH-CΠPePëC... PsP·PSP°Pe PeCḡPsPIPsC,PµC±C-, CÍ C,PsPjCÍ  
C±PëCÍP»C- PiCḡPëC...PsPIP°PSPsC—, PsCÍPsP±P»PëPIPs PiCḡPsC,CΠPiPsPj PiPµCḡC€PëC...  
C,PëP¶PSC-PI P»C-PeCÍPIP°PSPSCΠ C,P°/P°P±Ps PiC-CÍP»CΠ C-PSPIP°P·PëPIPSPëC...  
PeP°CḡPrC-PsP»PsPiC-C±PSPëC... PiCḡPsC†PµPrCÍCḡ P°P±Ps C...C-CḡCÍCḡPiC-C±PSPsPiPs  
PIC,CḡCÍC†P°PSPSCΠ. PkPµ CḡPµPePsPjPµPSPPrCÍC",CHCÍCΠ PsPrPSPsC±P°CÍPSPµ  
P·P°CÍC,PsCÍCÍPIP°PSPSCΠ P»C-PeP°CḡCÍCHPePsPiPs P·P°CÍPsP±CÍ PḡP»PhP'PhPŸPḡ P·  
PiPµCḡPsCḡP°P»CHPSPëPjPë P°PSC,PëPePsP°PiCÍP»CΠPSC,P°PjPë, PsCÍPeC-P»CHPePë C†Pµ  
PjPsP¶Pµ PiPsCÍPëP»PëC,Pë C-PSC,PµPSCÍPëPIPSC-CÍC,CH PeCḡPsPIPsC,PµC±C- (PrPëPI.  
CḡPsP·PrC-P» B«P'P·P°C" PjPsPrC-CΠ P· C-PSC€PëPjPë P»C-PeP°CḡCÍCHPePëPjPë  
P·P°CÍPsP±P°PjPë C,P° C-PSC€C- PIPëPrPë PIP·P°C" PjPsPrC-PNḡB»).

PµPµCḡPµPr P±CÍPrCH-CΠPePsCḡ P·P°PiP»P°PSPsPIP°PSPsCḡ PsPiPµCḡP°C†C-C" Cḡ, P°  
C,P°PePsP¶ PiPµCḡPµPr PiPsC†P°C,PePsPj P·P°CÍC,PsCÍCÍPIP°PSPSCΠ P±CÍPrCH-CΠPePsPiPs  
PSPsPIPsPiPs P»C-PeP°CḡCÍCHPePsPiPs P·P°CÍPsP±CÍ, PiP°C†C-C" PSC,Pë PiPsPIPëPSPSC-  
PiPsPIC-PrPsPjP»CΠC,Pë P»C-PeP°CḡC-PI, CÍ C,PsPjCÍ C±PëCÍP»C- CÍC,PsPjP°C,PsP»PsPiC-PI,  
PiCḡPs PiCḡPëPNḡPsPj P»C-PeP°CḡCÍCHPePsPiPs P·P°CÍPsP±CÍ PḡP»PhP'PhPŸPḡ. Pj CḡP°P·C-  
PiPµCḡPµPrP±P°C†PµPSPsC— PiP»P°PSPsPIPsC— PsPiPµCḡP°C†C-C—, PiPsC,CḡC-P±PSPs  
PiPµCḡPµPiP»CΠPSCÍC,Pë PSPµPsP±C...C-PrPSC-CÍC,CH P·P°CÍC,PsCÍCÍPIP°PSPSCΠ

PiPsPrPIC-PN<sub>2</sub>PSPsC— P°PSC,PëC,ChPsPjP±PsC†PëC,P°ChPSPsC— C,PμChP°PiC-C— PSP°  
PePsChPëC†C,Ch P·P°C†C,PsC†C†PIP°PSPSC† PsPrPSPsPiPs  
P°PSC,PëC,ChPsPjP±PsC,PëC†PSPsPiPs P»C-PeP°ChC†CHPePsPiPs P·P°C†PsP±C†. Pj  
PIPëPiP°PrPeC† C,PëPjC†P°C†PsPiPsPiPs PiChPëPiPëPSPμPSPSC†  
P°PSC,PëC,ChPsPjP±PsC†PëC,P°ChPSPsC— C,PμChP°PiC-C—, P»C-PeP°ChC†CHPePëPN<sub>2</sub>  
P·P°C†C-P± P<sub>7</sub>P>PhP'PhPŸP<sub>7</sub> PSPμPsP±C...C-PrPSPs PIC-PrPjC-PSPëC,Pë P·P° 7 PrPSC-PI PrPs  
C...C-ChC†ChPiC-C†PSPsPiPs PIC,ChC†C†P°PSPSC†.

P>C-PeP°ChC†CHPePëPN<sub>2</sub> P·P°C†C-P± P<sub>7</sub>P>PhP'PhPŸP<sub>7</sub> P·P±C-P»CHC€C†C" C†P°C†  
PeChPsPiPsC,PμC†C-; PN<sub>2</sub>PsPiPs C†P»C-Pr P·P°C†C,PsC†PsPIC†PIP°C,Pë P·  
PsP±PμChPμP¶PSC-C†C,Ch PiP°C†C-C"°PSC,P°Pj, C†PeC- PjP°ChC,Ch C†ChP°P¶PμPSPSC†,  
C%Ps PiC-PrPIPëC%CrChC,Ch C†C...PëP»CHPSC-C†C,Ch PrPs ChPsP·PIPëC,PeC†  
PeChPsPiPsC,PμC† (P·PsPeChPμPjP° C€P»C†PSPePsPiPs-PePëC€PePsPiPëC... C,P°  
PIPSC†C,ChC-C€PSCbPsPsC†PSPëC...).

PμP°C†C-C"°PSC,C-PI C,P°PePsP¶ C†P»C-Pr PiPsPiPμChPμPrPëC,Pë PiChPs PjPsP¶P»PëPiPμ  
P·P±C-P»CHC€PμPSPSC† C†P°C†C†, PSPμPsP±C...C-PrPSPsPiPs PrP»C† P·C†PiPëPSPePë  
PeChPsPiPsC,PμC†C-, C† ChP°P·C- P·P°C†C,PsC†C†PIP°PSPSC† P»C-PeP°ChC†CHPePsPiPs  
P·P°C†PsP±C† P<sub>7</sub>P>PhP'PhPŸP<sub>7</sub>, P° C,P°PePsP¶ PiChPs PSPμPsP±C...C-PrPSC-C†C,Ch  
PiPsPIC-PrPsPjP»C†C,Pë C†PIPsC"°PjC† P»C-PeP°ChPμPIC- PiChPs PIPëPSPëPePSPμPSPSC† C†  
PSPëC... P±C†PrChC-C†PePsC— PSPμP·PIPëC†PSPsC— PeChPsPiPsC,PμC†C- (P·P°  
P»PsPeP°P»C-P·P°C†C-C"°Ch P°P±Ps C,ChPëPiP°P»C-C†C,Ch).

*PŸChPsPjP±PsC,PëC†PSP° C,ChPsPjP±PsC†PëC,PsPiPμPSC-C†PSP° PiC¿ChPiC¿ChP° (PŸPŸPμ)*

P"°C†P¶Pμ ChC-PrPePs PIC-PrP·PSP°C†P°P»PëC†C† PIPëPiP°PrPePë ChPsP·PIPëC,PeC† PŸPŸPμ  
PSP° C,P»C- P·P°C†C,PsC†C†PIP°PSPSC† PeP»PsPiC-PrPsPiChPμP»Ch, C-PSPePsP»Pë  
PSP°PIC-C,Ch PiC-C†P»C† PSPμC,ChPëPiP°P»PsPiPs P·P°C†C,PsC†C†PIP°PSPSC†. PiPμ  
C...P°ChP°PeC,PμChPëP·C†PIP°P»PsC†C† C,ChPsP±PsC†PëC,PsPiPμPSC-C"°Ch C,P°  
PjC-PeChPsP°PSPiC-PsPiP°C,PëC†PSPsCh PiPμPjPsP»C-C,PëC†PSPsCh P°PSPμPjC-C"°Ch C†  
C†PiPsP»C†C†PμPSPSC- P· PSPμPICChPsP»PsPiC-C†PSPsCh C†PëPjPiC,PsPjP°C,PëPePsCh,  
PiPsChC†C€PμPSPSC†PjPë C,,C†PSPeC†C-C— PSPëChPsPe P°P±Ps PiP°ChC†C†PePsCh. PŸPŸPμ  
PjPsP¶Pμ C†C,P°PSPsPiPëC,Pë P·P°PiChPsP·C† PrP»C† P¶PëC,C,C† C- PiPsC,ChPμP±C†C"  
PiChPsPiPμPrPμPSPSC† PSPμPIC-PrPeP»P°PrPSPëC... P»C-PeC†PIP°P»CHPSPëC...  
P·P°C...PsPrC-PI, PIPeP»ChC†P°ChC†Pë PiP»P°P·PjP°C,,PμChPμP·.

*Pk°P±C¿C,P° PiPμPjPsC,,C-P»C-C†*

PμPsPIC-PrPsPjP»C†P»PsC†C† PiChPs PIPëPiP°PrPePë ChPsP·PIPëC,PeC† PSP°P±C†C,PsC—  
PiPμPjPsC,,C-P»C-C— PiC-C†P»C† P·P°C†C,PsC†C†PIP°PSPSC† PeP»PsPiC-PrPsPiChPμP»Ch. Pj  
ChP°P·C- PiC-PrC,PIPμChPPrP¶PμPSPsPiPs C-P·PsP»CHPsPiP°PSPsPiPs  
P·P±C-P»CHC€PμPSPSC† P°PeC,PëPiPsPiP°PSPsPiPs C†P°C†C† (PhPŸPŸPŸ), C%Ps  
C†C†PiChPsPiPsPrP¶C†C",ChC†C† P°P±Ps PSPμ C†C†PiChPsPiPsPrP¶C†C",ChC†C†  
PeChPsPiPsC,PμC†PμCh, PiPëC,P°PSPSC† PiChPs PrC-P°PiPSPsC†C,C†PIP°PSPSC†  
PSP°P±C†C,PsC— PiPμPjPsC,,C-P»C-C— PiPsPiPëPSPSPs P±C†C,Pë ChPsP·PiP»C†PSC†C,Ps.  
PμP°C†C-C"°PSC,Pë P· PiC-PrC,PIPμChPPrP¶PμPSPëPj PrC-P°PiPSPsP·PsPj PSP°P±C†C,PsC—  
PiPμPjPsC,,C-P»C-C— PiPsPiPëPSPSC- P·PSP°C...PsPrPëC,PëC†C† PiC-Pr PSP°PiP»C†PjPrPsPj  
P»C-PeP°ChC†C C- PsC,ChPëPjC†PIP°C,Pë P»C-PeC†PIP°PSPSC†; P·P°C†C,PsC†C†PIP°PSPSC†  
PeP»PsPiC-PrPsPiChPμP»Ch C,P°PePëPj PiP°C†C-C"°PSC,P°Pj PiPsC,ChC-P±PSPs  
PiChPëPiPëPSPëC,Pë.

*PkPμC%PsPrP°PIPSPs PiPμCTjPμPSPμCfPμPSC- C,CTjP°PSP·PëC,PsCTjPSP° C-CëPμPjC-CfPSP° P°C,P°PeP° P°P±Ps C-PSCfCzP»CHbC,*

P'CfP»Ps P·P°CfPIC-PrCfPμPSPs, C%Ps P·P°CfC,PsCfCfPIP°PSPSCf  
PeP»PsPc-PrPsPiCTjPμP»Cf PI PePsPjP±C-PSP°CfC-C— P·  
P°CfPμC,PëP»CfP°P»C-CfPëP»PsPIPsCf PePëCfP»PsC,PsCf Cr PiP°CfC-C"PS,C-PI, CfPeC-  
PSPμC%PsPrP°PIPSPs PiPμCTjPμPSPμCfP»Pë C,CTjP°PSP·PëC,PsCTjPSCf C-CëPμPjC-CfPSCf  
P°C,P°PeCf P°P±Ps C-PSCfCfP»CHbC, C- PjP°CHC,CH PIPëCfPsPePëPñ CTjPëP·PëPe  
CTjPsP·PIPëC,PeCf PIPsPIC,PsCTjPSPëC... C-CëPμPjC-CfPSPëC... PIPsPrC-Pñ, PIPsCfPëP»CfC"  
PIPëCTjP°PμPSCf PeCTjPsPIPsC,PμCfCf. PjP°PePëPj CfPëPSPsPj, CfP»C-Pr  
PrPsC,CTjPëPjCfPIP°C,PëCfCH PsP±PμCTjPμPμPSPSCfC,C- Cr CTjP°P·C- PrPsPrP°C,PePsPIPsPiPs  
P·P°CfC,PsCfCfPIP°PSPSCf C,P°PePsC— PePsPjP±C-PSP°CfC-C—, PsPeCTjC-Pj  
PIPëPiP°PrPeC-PI, PrP»Cf CfPePëC... PrPsPIPμPrPμPSPs PSP°CfPIPSC-CfC,CH  
CfPiCTjPëCfC,P»PëPIPsPiPs PμC,,PμPeC,Cf C—C— P·P°CfC,PsCfCfPIP°PSPSCf.

*PiPëC,PsC...CTjPsPj P 450 2Pj19 (CYP2Pj19)*

PαP°CTjPjP°PePsPiPμPSPμC,PëPeP°

Pj PiP°CfC-C"PS,C-PI C-P· PIPsPIC-P»CHbPSPëPj PjPμC,P°P±PsP»C-P·PjPsPj CYP2Pj19 PiCTjPë  
P·P°CfC,PsCfCfPIP°PSPSC- PeP»PsPc-PrPsPiCTjPμP»Cf PI CTjPμPePsPjPμPSPPrPsPIP°PSPëC...  
PrPsP·P°C... CfC,PIPsCTjCHC"C,CHbCfCf PjPμPSCëPμ P°PeC,PëPIPsPiPs  
PjPμC,P°P±PsP»C-C,Cf C,P° CfPiCTjPëCfPëPSCfC"C,CHbCfCf PjPμPSCëPëPñ PIPiP»PëPI PSP°  
C,,CfPSPëCfC-Cf C,CTjPsPjP±PsCfPëC,C-PI. PcfPSCfCHC,CH C,PμCfC,Pë PrP»Cf  
PIPëP·PSP°CfPμPSPSCf PiPμPSPsC,PëPiCf CYP2Pj19 PiP°CfC-C"PS,C,P°.

PbCfPeC-P»CHbPePë PjPμC,P°P±PsP»C-P·Pj PeP»PsPc-PrPsPiCTjPμP»Cf PI P°PeC,PëPIPsPëPñ  
PjPμC,P°P±PsP»C-C, PIC-PrP±CfPIP°C"C,CHbCfCf CfP°CfC,PePsPIPs P·P° PrPsPiPsPjPsPiPsCf  
CYP2Pj19, P·P°CfC,PsCfCfPIP°PSPSCf P»C-PeP°CTjCfCHbPePëC... P·P°CfPsP±C-PI, C%Ps  
PiCTjPëPiPSC-CfCfCHC,CH P°PeC,PëPIPsC-CfC,CH CcfCHbPsPiPs C,,PμCTjPjPμPSC,Cf,  
PIC-CTjPsPiC-PrPSPs, PiCTjPëP·PIPsPrPëC,CH PrPs P·PSPëPμPμPSPSCf CTjC-PIPsCf  
P°PeC,PëPIPsPiPs PjPμC,P°P±PsP»C-C,Cf PeP»PsPc-PrPsPiCTjPμP»Cf. PjP»C-PSC-CfPSP°  
P·PSP°CfPëPjC-CfC,CH C,P°PePsC— PIP·P°C"PjPsPrC-C— PSPμ PIPëP·PSP°CfPμPSP°. PjP»C-Pr  
CfPSPëPeP°C,Pë PsPrPSPsCfP°CfPSPsPiPs P·P°CfC,PsCfCfPIP°PSPSCf  
P»C-PeP°CTjCfCHbPePëC... P·P°CfPsP±C-PI, C%Ps PiCTjPëPiPSC-CfCfCHC,CH  
P°PeC,PëPIPsC-CfC,CH CYP2Pj19 (PrPëPI. CTjPsP·PrC-P»Pë  
B«PαP°CTjPjP°PePsPeC-PSPμC,PëPeP°B» C,P° B«P'P·P°C"PjPsPrC-Cf P· C-PSCëPëPjPë  
P»C-PeP°CTjCfCHbPePëPjPë P·P°CfPsP±P°PjPë C,P° C-PSCëC- PIPëPrPë PIP·P°C"PjPsPrC-PñB»).

P'C-CTjPsPiC-PrPSPs, C%Ps PIPëPePsCTjPëCfC,P°PSPSCf P»C-PeP°CTjCfCHbPePëC...  
P·P°CfPsP±C-PI, CfPeC- C-PSPPrCfPeCfCHC,CH P°PeC,PëPIPsC-CfC,CH CYP2Pj19,  
PiCTjPëP·PIPμPrPμ PrPs PiC-PrPIPëC%PμPSPSCf CTjC-PIPsCf P°PeC,PëPIPsPiPs  
PjPμC,P°P±PsP»C-C,Cf PeP»PsPc-PrPsPiCTjPμP»Cf C,P° PjPsPμPiPiPsCfPëP»PëC,Pë  
CTjPëP·PëPe PeCTjPsPIPsC,PμCfC-. PIPe P·P°PiPsP±C-PμPSPëPñ P·P°C...C-Pr  
CTjPμPePsPjPμPSPPrCfC"C,CHbCfCf CfPSPëPeP°C,Pë CfPiC-P»CHbPSPsPiPs  
P·P°CfC,PsCfCfPIP°PSPSCf PIPsC,CfPμPSPëC... C-PSPPrCfPeC,PsCTjC-PI CYP2Pj19 (PrPëPI.  
CTjPsP·PrC-P» B«PμPsP±C-CfPSC- CTjPμP°PeCfC-C—B»).

*PjCzP±CfC,CTjP°C,Pë CYP2C8*

PkPμPsP±C...C-PrPSPs P· PsP±PμCTjPμPμPSC-CfC,CH PiCTjPëP·PSP°CfP°C,Pë  
PeP»PsPc-PrPsPiCTjPμP»CH PsPrPSPsCfP°CfPSPs P· P»C-PeP°CTjCfCHbPePëPjPë



- PIP°C†C-C" PSC, P°Pj, CIPeC- P·P»PsPIP¶PëPIP°CĤC, CH P°P»PePsPiPsP»PµPj.  
 PĥP»PePsPiPsP»CH PjPsP¶Pµ P·P±C-P»CHC€CfPIP°C, Pë CĤPëP·PëPe CfCĤP°P¶PµPSPSCĬ  
 PëPĥPÿ PïCĤPë PIP¶PëPIP°PSPSC- P°C†PµC, PëP»CĬP°P»C-C†PëP»PsPIPsC— PePëCĬP»PsC, Pë.  
 PµP°C†C-C" PSC, C-PI CĬP»C-Pr PïCĤPsPePsPSCĬCfP»CHC, CfPIP°C, Pë C%PsPrPs CĤPëP·PëPeCf  
 CfCĤP°P¶PµPSPSCĬ PëPĥPÿ C, P° PIPëPSPëPePSPµPSPSCĬ PeCĤPsPIPsC, PµC†C- PïCĤPë  
 PIP¶PëPIP°PSPSC- P°P»PePsPiPsP»CH PSP° C,, PsPSC- P·P°CĬC, PsCĬCfPIP°PSPSCĬ  
 PeP»PsPiC-PrPsPiCĤPµP»CH C, P° P°C†PµC, PëP»CĬP°P»C-C†PëP»PsPIPsC— PePëCĬP»PsC, Pë,  
 PsCĬPsP±P»PëPIPs CIPeC%Ps PIP¶PëPIP°PSPSCĬ P°P»PePsPiPsP»CH C" C...CĤPsPSC-C†PSPëPj  
 P°P±Ps C, CIP¶PePëPj (PrPëPI. CĤPsP·PrC-P» B«P'P·P°C"PjPsPrC-CĬ P· C-PSC€PëPjPë  
 P»C-PeP°CĤCĬCHPePëPjPë P·P°CĬPsP±P°PjPë C, P° C-PSC€C- PIPëPrPë PIP·P°C"PjPsPrC-C—B»).

*P—P°C...PIPSCĤCĤPIP°PSPSCĬ PëPĥPÿ*

P— PsP±PµCĤPµP¶PSC-CĬC, CH CĬP»C-Pr P·P°CĬC, PsCĬPsPICfPIP°C, Pë  
 P»C-PeP°CĤCĬCHPePëPµ P·P°CĬC-P± PĥP·PĥP'PĥPÿPĥ PïP°C†C-C" PSC, P°Pj, C%Ps  
 PjP°CĤC, CH PI P°PSP°PjPSPµP·C- PïPµPiC, PëC†PSCf PIPëCĤP°P·PeCf P°P±Ps  
 PïP°CĬC, CĤPsPrCfPsPrPµPSP°P»CHPSCf PeCĤPsPIPsC, PµC†Cf, P°P±Ps C-PSC€C-  
 CĬPëPjPiC, PsPjPë CĤPsP·P»P°PrCf PIPµCĤC...PSCĤPsPiPs PIC-PrPrC-P»Cf PëPĥPÿ,  
 PsCĬPeC-P»CHPePë PIPsPSPë PjPsP¶CfC, CH P±CfC, Pë PSP°CĬP»C-PrPePsPj PIPëCĤP°P·PePë  
 C€P»CfPSPeP°, C%Ps PjPsP¶Pµ PïCĤPëP·PIPµCĬC, Pë PrPs C€P»CfPSPePsPIPsC—  
 PeCĤPsPIPsC, PµC†C-. PĥPsP¶P»PëPIPµ PIPëPSPëPePSPµPSPSCĬ PSPµP±P°P¶P°PSPëC...  
 PµC,, PµPeC, C-PI P· P±PsPeCf PëPĥPÿ, Cf C, PsPjCf C†PëCĬP»C- P±PsP»CH PI C€P»CfPSPeCf,  
 PïPµC†C-C—, PSCfPrPsC, Pë, P±P»CHPIP°PSPSCĬ C, P° C€P»CfPSPePsPIPs-PePëC€PePsPIPsC—  
 PeCĤPsPIPsC, PµC†C-. PĬPsC†P° C-PSC€C- CĬPëPjPiC, PsPjPë CĤPsP·P»P°PrCf  
 PIPµCĤC...PSCĤPsPiPs PIC-PrPrC-P»Cf PëPĥPÿ, C, P°PeC- CIPe PrPëCĬPïPµPiCĬC-CĬ, C"  
 CĤPsP·PïPsPICĬCĤPrP¶PµPSPëPjPë C- PjPsP¶CfC, CH PIPëPSPëPeP°C, Pë PI P±CfPrCH-  
 CIPePëPµ C†P°CĬ PïCĤPsC, CIPiPsPj P»C-PeCfPIP°PSPSCĬ, P»C-PeP°CĤC- PïPsPIPëPSPSC-  
 P±CfC, Pë CfPIP°P¶PSPëPjPë C%PsPrPs PsP·PSP°Pe CĤPsP·PIPëC, PeCf PIPëCĤP°P·PePë C, P°  
 PeCĤPsPIPsC, PµC†C-, PSP°PIC-C, CH P·P° PIC-PrCĬCfC, PSPCĬC, C- PïPsPïPµCĤPµPrPSC-C...  
 CĬPëPjPiC, PsPjC-PI P· P±PsPeCf PëPĥPÿ. PµP°C†C-C" PSC, C-PI CĬP»C-Pr  
 PïCĤPsC-PSC,, PsCĤPjCfPIP°C, Pë PïCĤPs CĬPëPjPiC, PsPjPë PSPµP±P°P¶P°PSPëC...  
 PµC,, PµPeC, C-PI P· P±PsPeCf PëPĥPÿ C, P° P·P°C...PsPrPë, CIPePëC... PSPµPsP±C...C-PrPSPs  
 PIP¶PëC, Pë Cf CĤP°P·C- C—C... PïPsCIPIPë.

Pj PïP°C†C-C" PSC, C-PI, CIPeC- PsPrPSPsC†P°CĬPSPs PïCĤPëPµPjP°CĤC, CH  
 PSC-PePsCĤP°PSPPrPëP» C- PĥPµP—P—, P·PsPeCĤPµPjP° P°C†PµC, PëP»CĬP°P»C-C†PëP»PsPICf  
 PePëCĬP»PsC, Cf C- P»C-P·PëPSCf P°C†PµC, PëP»CĬP°P»C-C†PëP»P°C, (P·PĥPÿ), C-CĬPSCfC"  
 PïC-PrPIPëC%PµPSPëPµ CĤPëP·PëPe PIPëPSPëPePSPµPSPSCĬ C, CIP¶PePëC...  
 CfCĬPeP»P°PrPSPµPSCĤ, C, P°PePëC... CIPe PIPëCĤP°P·PePsPIP° C...PIPsCĤPsP±P°,  
 PïPµCĤC,, PsCĤP°C†C-CĬ C, P° PeCĤPsPIPsC, PµC†C- PëPĥPÿ (PrPëPI. CĤPsP·PrC-P»  
 B«P'P·P°C"PjPsPrC-CĬ P· C-PSC€PëPjPë P»C-PeP°CĤCĬCHPePëPjPë P·P°CĬPsP±P°PjPë C, P°  
 C-PSC€C- PIPëPrPë PIP·P°C"PjPsPrC-C—B»).

*P"PsPiPsPjC-P¶PSC- CĤPµC†PsPIPëPSPë*

PjPµPµ P»C-PeP°CĤCĬCHPePëPµ P·P°CĬC-P± C, P°PePsP¶ PjC-CĬC, PëC, CH  
 PiC-PrCĤPsPiPµPSC-P·PsPIP°PSCf CĤPëC†PëPSPsPICf PsP»C-CH, C%Ps PjPsP¶Pµ  
 PïCĤPëC†PëPSCĬC, Pë CĤPsP·P»P°Pr C€P»CfPSPeP° C, P° PrC-P°CĤPµCH.

*PĥCĬPsP±P»PëPIC- P·P°PiPsP±C-P¶PSC- P·P°C...PsPrPë PïCĤPë C¿C, PëP»C-P·P°C†C-C—*

P'CfPrCH-CIPePëPµ PSPµPIPëPePsCĤPëCĬC, P°PSPëPµ P»C-PeP°CĤCĬCHPePëPµ

РубР»С-РSC-С†РSPёРНё РrPsCfPIC-Рr Р·Р°CfC,PsCfCfPIP°PSPSCf РrPsР, С%оPs  
PiPuCfPuPiPёC%оCrCfC,CH 100 PjPi/РrPsР±Cr C,Р° CfCfPiP°CfC,CH 500 PjPi/РrPsР±Cr, C"  
PSPuРrPsCfC,Р°C,РSC-Рj. PhC,Р¶Pu, CfPuPePsPjPuPSPРР°C†C-C— CfC,PsCfPsPIPSPs РrPsР,

C%Ps PrPsC<sub>7</sub>C-PIPSCH<sub>7</sub>C,CH C,P° P<sub>i</sub>P<sub>μ</sub>C<sub>7</sub>P<sub>μ</sub>PIPëC%Cr<sub>7</sub>C,CH  
B B B B B B B B B B B B B B B B 500 PjPi/PrPsP±Cr, C,P°PePsP¶ C<sub>7</sub>C,PsC<sub>7</sub>Cr<sub>7</sub>C,CHC<sub>7</sub>C<sub>7</sub>  
C- C†CHPsPiPs PrC-P°P<sub>i</sub>P°P·PsPSC<sub>7</sub> PrPsP·.

*P°PsP·Pë, C%Ps PrPsC<sub>7</sub>C-PIPSCH<sub>7</sub>C,CH C,P° P<sub>i</sub>P<sub>μ</sub>C<sub>7</sub>P<sub>μ</sub>PIPëC%Cr<sub>7</sub>C,CH 500 PjPi/PrPsP±Cž*

P<sub>μ</sub>C<sub>7</sub>PëPiPSC-C†P<sub>μ</sub>PSPSC<sub>7</sub> C<sub>7</sub>PëPSC,P<sub>μ</sub>P·Cr P<sub>i</sub>C<sub>7</sub>PsC<sub>7</sub>C,P°PiP»P°PSPPrPëPSC-PI PjPsP¶P<sub>μ</sub>  
PjP°C,Pë PSP<sub>μ</sub>C<sub>7</sub>P<sub>i</sub>C<sub>7</sub>PëC<sub>7</sub>C,P»PëPIPëP<sub>μ</sub> PIP<sub>i</sub>P»PëPI PSP° PIP°PiC-C,PSC-C<sub>7</sub>C,CH C,P°/P°P±Ps  
C<sub>7</sub>PsP·PIPëC,PsPe P<sub>μ</sub>PjP±C<sub>7</sub>C-PsPSP°/PiP»PsPrP°. P°P°PSC-  
P<sub>μ</sub>PiC-PrP<sub>μ</sub>PjC-PsP»PsPiC-C†PSPëC... PrPsC<sub>7</sub>P»C-PrP¶P<sub>μ</sub>PSCH C<sub>7</sub>PiC-PrC†P°C,CH P<sub>i</sub>C<sub>7</sub>Ps  
PSP°C<sub>7</sub>PIPSC-C<sub>7</sub>C,CH P<sub>i</sub>C-PrPIPëC%P<sub>μ</sub>PSPsPiPs C<sub>7</sub>PëP·PëPeCr PIPëPePëPrPSC<sub>7</sub>,  
PIPëPSPëPePSP<sub>μ</sub>PSPSC<sub>7</sub> PIP°PrPë C<sub>7</sub>P<sub>μ</sub>C<sub>7</sub>C†C<sub>7</sub> C,P° P<sub>i</sub>C<sub>7</sub>PsPrP¶P<sub>μ</sub>PSPsC— C%C-P»PëPSPë  
C€P»CrPSPeP° PiC-C<sub>7</sub>P»C<sub>7</sub> P·P°C<sub>7</sub>C,PsC<sub>7</sub>Cr<sub>7</sub>PIP°PSPSC<sub>7</sub> C-PSPiC-P±C-C,PsC<sub>7</sub>Cr  
C<sub>7</sub>PëPSC,P<sub>μ</sub>P·Cr P<sub>i</sub>C<sub>7</sub>PsC<sub>7</sub>C,P°PiP»P°PSPPrPëPSC-PI PSP° C<sub>7</sub>P°PSPSC-C... C<sub>7</sub>C,CHPsPeP°C...  
PIP°PiC-C,PSPsC<sub>7</sub>C,-. P<sub>7</sub>P±C<sub>7</sub>PsP»C<sub>7</sub>C,PSPëP<sub>μ</sub> C<sub>7</sub>PëP·PëPe PIPëPSPëPePSP<sub>μ</sub>PSPSC<sub>7</sub> PIP°PrPë  
C<sub>7</sub>P<sub>μ</sub>C<sub>7</sub>C†C<sub>7</sub> P·P±C-P»CHC€CrPIP°PIC<sub>7</sub>C<sub>7</sub> P· PjP<sub>μ</sub>PSC€P<sub>μ</sub> PSC-P¶ 1 % PrPs  
P<sub>i</sub>C<sub>7</sub>PëP±P»PëP·PSPs 1,5 %. P°PIP°P¶P°C,C<sub>7</sub>CHC<sub>7</sub>C<sub>7</sub>, C%Ps C<sub>7</sub>PëP·PëPe P·C<sub>7</sub>PsC<sub>7</sub>C,P°PI  
C<sub>7</sub>P°P·PsPj C-P· PrPsP·PsC<sub>7</sub> C,P° C,C<sub>7</sub>PëPIP°P»C-C<sub>7</sub>C,CH P·P°C<sub>7</sub>C,PsC<sub>7</sub>Cr<sub>7</sub>PIP°PSPSC<sub>7</sub>. Pj  
C,PIP°C<sub>7</sub>PëPS PIPiP<sub>μ</sub>PrP<sub>μ</sub>PSPSC<sub>7</sub> C-PSPiC-P±C-C,PsC<sub>7</sub>Cr C<sub>7</sub>PëPSC,P<sub>μ</sub>P·Cr  
P<sub>i</sub>C<sub>7</sub>PsC<sub>7</sub>C,P°PiP»P°PSPPrPëPSC-PI P<sub>i</sub>C<sub>7</sub>PëP·PIPsPrPëP»Ps PrPs  
C<sub>7</sub>P<sub>μ</sub>PiC<sub>7</sub>PsPrC<sub>7</sub>PeC,PëPIPSPsC— C,PsPeC<sub>7</sub>PëC†PSPsC<sub>7</sub>C,-. P—P° PIC-PrC<sub>7</sub>Cr<sub>7</sub>C,PSPsC<sub>7</sub>C,-  
PSP°PiP°P»CHPsPsC— P<sub>i</sub>PsC,C<sub>7</sub>P<sub>μ</sub>P±Pë P°C†P<sub>μ</sub>C,PëP»C<sub>7</sub>P°P»C-C†PëP»PsPIC<sub>7</sub> PePëC<sub>7</sub>P»PsC,C<sub>7</sub>  
PSP<sub>μ</sub> C<sub>7</sub>P»C-Pr P<sub>i</sub>C<sub>7</sub>PëP·PSP°C†P°C,Pë P°P¶ PrPs B B B B B B B B B B B B B 24-PiPs  
C,PëP¶PSC<sub>7</sub> P°PjP<sub>μ</sub>PSPsC<sub>7</sub>P<sub>μ</sub>C— (5-P<sub>μ</sub> PjC-C<sub>7</sub>C<sub>7</sub>C†CH PIP°PiC-C,PSPsC<sub>7</sub>C,-). P<sub>i</sub>PeC%Ps  
P°C†P<sub>μ</sub>C,PëP»C<sub>7</sub>P°P»C-C†PëP»PsPIP° PePëC<sub>7</sub>P»PsC,P° P·P°C<sub>7</sub>C,PsC<sub>7</sub>PsPIC<sub>7</sub>C,C<sub>7</sub>CHC<sub>7</sub>C<sub>7</sub>  
P¶C-PSPePsC<sub>7</sub>, C<sub>7</sub>PeP° PSP°PjP°PiP°C,C<sub>7</sub>CHC<sub>7</sub>C<sub>7</sub> P·P°PIP°PiC-C,PSC-C,Pë, P°P±Ps PrPs 24-PiPs  
C,PëP¶PSC<sub>7</sub> P°PjP<sub>μ</sub>PSPsC<sub>7</sub>P<sub>μ</sub>C— (5-P<sub>μ</sub> PjC-C<sub>7</sub>C<sub>7</sub>C†CH PIP°PiC-C,PSPsC<sub>7</sub>C,-), C<sub>7</sub>P»C-Pr  
P<sub>i</sub>C<sub>7</sub>PëP·PSP°C†P°C,Pë C<sub>7</sub>PePsPjPsPiP° PSPëP¶C†Cr PrPsP·Cr P<sub>i</sub>C<sub>7</sub>PsC,C<sub>7</sub>PiPsPj C<sub>7</sub>PePsPjPsPiP°  
PePsC<sub>7</sub>PsC,C€PsPiPs P<sub>i</sub>P<sub>μ</sub>C<sub>7</sub>C-PsPrC<sub>7</sub>.

P<sub>μ</sub>PsC†PëPSP°C<sub>7</sub>C†Pë P· 6-PiPs PjC-C<sub>7</sub>C<sub>7</sub>C†C<sub>7</sub> PIP°PiC-C,PSPsC<sub>7</sub>C,- CrC<sub>7</sub>C-  
C-PSPiC-P±C-C,PsC<sub>7</sub>Pë C<sub>7</sub>PëPSC,P<sub>μ</sub>P·Cr P<sub>i</sub>C<sub>7</sub>PsC<sub>7</sub>C,P°PiP»P°PSPPrPëPSC-PI PjPsP¶Cr<sub>7</sub>C,CH  
C<sub>7</sub>P<sub>i</sub>C<sub>7</sub>PëC†PëPSC<sub>7</sub>C,Pë Cr P<sub>i</sub>P»PsPrP°:

- P»P<sub>μ</sub>PiP<sub>μ</sub>PSP<sub>μ</sub>PIC<sub>7</sub> C,P° C<sub>7</sub>P<sub>μ</sub>C<sub>7</sub>C†P<sub>μ</sub>PIC<sub>7</sub> C,PsPeC<sub>7</sub>PëC†PSC-C<sub>7</sub>C,CH (C-P·  
P<sub>i</sub>P<sub>μ</sub>C<sub>7</sub>P<sub>μ</sub>PrC†P°C<sub>7</sub>PSPëPj P·P°PeC<sub>7</sub>PëC,C,C<sub>7</sub>Pj P°C<sub>7</sub>C,P<sub>μ</sub>C<sub>7</sub>C-P°P»CHPsPëC... P<sub>i</sub>C<sub>7</sub>PsC,PsPe  
C,P° P»P<sub>μ</sub>PiP<sub>μ</sub>PSP<sub>μ</sub>PIPsC<sub>7</sub> PiC-P<sub>i</sub>P<sub>μ</sub>C<sub>7</sub>C,P<sub>μ</sub>PSP·C-C<sub>7</sub>C<sub>7</sub>);

- P<sub>i</sub>PsC<sub>7</sub>CrC€P<sub>μ</sub>PSPSC<sub>7</sub> C,C<sub>7</sub>PsPeC†C-C— PSPëC<sub>7</sub>PsPe, C%Ps PjPsP¶P<sub>μ</sub>  
P<sub>i</sub>C<sub>7</sub>PsPiC<sub>7</sub>P<sub>μ</sub>C<sub>7</sub>Cr<sub>7</sub>PIP°C,Pë PI PSPëC<sub>7</sub>PePsPIC<sub>7</sub> PSP<sub>μ</sub>PrPsC<sub>7</sub>C,P°C,PSC-C<sub>7</sub>C,CH C-P·  
PsP»C-PiPsPiC-PrC<sub>7</sub>P°PjPSC-PsPSPsPj;

Cr P¶C-PSPePë C,P° P<sub>i</sub>P»PsPrP° PSP°P<sub>i</sub>C<sub>7</sub>PëPeC-PSC†C- PIP°PiC-C,PSPsC<sub>7</sub>C,-:

- PjPsP¶P»PëPIP<sub>μ</sub> P·P±C-P»CHC€P<sub>μ</sub>PSPSC<sub>7</sub> C†P°C<sub>7</sub>Cr PeC<sub>7</sub>PsPIPsC,P<sub>μ</sub>C†C-,  
P°PSC,PëP°PiC<sub>7</sub>P<sub>μ</sub>PiP°PSC,PSPëP<sub>μ</sub> P<sub>μ</sub>C,,P<sub>μ</sub>PeC,, C<sub>7</sub>PePëP<sub>μ</sub> PjPsP¶P<sub>μ</sub> PIPëPSPëPePSC<sub>7</sub>C,Pë  
PSP°PIC-C,CH P·P° PrC<sub>7</sub>P¶P<sub>μ</sub> PSPëP·CHPePëC... PrPsP·;

- P<sub>i</sub>C<sub>7</sub>PëPiPSC-C†P<sub>μ</sub>PSPSC<sub>7</sub> C<sub>7</sub>PePsC<sub>7</sub>PsC†P<sub>μ</sub>PSCH PjP°C,PePë, C<sub>7</sub>PeP<sub>μ</sub>  
P<sub>i</sub>C<sub>7</sub>PëP·PIPsPrPëC,CH PrPs P<sub>i</sub>C-P·PSC-C... P°P±Ps C,C<sub>7</sub>PëPIP°P»PëC... P<sub>i</sub>PsP»PsPiC-PI.

*P°PsPrCžPIP°PSPSC<sub>7</sub> PiC<sub>7</sub>CžPrPrC<sub>7</sub>*



РќРµPIC-PrPsPjPs, C†Pë PïCђPsPSPëPeP°C” PeP»PsPïC-PrPsPiCђPµP»CH Ć PiCђĆPrPSPµ  
PjPsP»PsPePs.

P’C’C,P°PSPsPIP»PµPSPs, C%Ps P°C†PµC,PëP»C’P°P»C-C†PëP»PsPIP° PePëC’P»PsC,P°  
PïCђPsPSPëPeP°C” Ć PiCђĆPrPSPµ PjPsP»PsPePs PI PsP±PjPµP¶PµPSC-PNë  
PeC-P»CHPePsC’C,C-. PµC-Pr C†P°C’ P·P°C’C,PsC’C’PIP°PSPSC¶ P»C-PeP°CђC’CHPePsPiPs  
P·P°C’PsP±Ć PµP»PhP’PhPŸPµ C’P»C-Pr PïCђPëPiPëPSPëC,Pë PiPsPrC’PIP°PSPSC¶  
PiCђĆPrPrCђ.

PrµCђC,PëP»CHPSC-C’C,CH

P”P°PSC- C%PsPrPs PIPïP»PëPIĆ PePsPjP±C-PSP°C†C-C—  
P°C†PµC,PëP»C’P°P»C-C†PëP»PsPIP° PePëC’P»PsC,P°/PeP»PsPïC-PrPsPiCђPµP»CH PSP°  
C,,PµCђC,PëP»CHPSC-C’C,CH PIC-PrC’C’C,PSC-.

P”PsC’P»C-PrP¶PµPSPSC¶ PSP° C,PIP°CђPëPSP°C... PïPsPeP°P·P°P»Pë, C%Ps  
PeP»PsPïC-PrPsPiCђPµP»CH PSPµ P·PjC-PSCђC” C,,PµCђC,PëP»CHPSPsC’C,C-.

РќРµPIC-PrPsPjPs, C†Pë P·PjC-PSCђC” C,,PµCђC,PëP»CHPSC-C’C,CH  
P°C†PµC,PëP»C’P°P»C-C†PëP»PsPIP° PePëC’P»PsC,P°.

*P—PrP°C,PSC-C’C,CH PIPïP»PëPIP°C,Pë PSP° CëPIPëPrPeC-C’C,CH CђPµP°PeC†C-C— PïCђPë  
PePµCђC’PIP°PSPSC- P°PIC,PsC,CђP°PSC’PïPsCђC,PsPj P°P±Ps C-PSCëPëPjPë  
PjPµC...P°PSC-P·PjP°PjPë.*

P»C-PeP°CђC’CHPePëPNë P·P°C’C-P± PµP»PhP’PhPŸPµ PSPµ PIPïP»PëPIP°C” P°P±Ps PjP°C”  
PSPµP·PSP°C†PSPëPNë PIPïP»PëPI PSP° CëPIPëPrPeC-C’C,CH CђPµP°PeC†C-C— PïCђPë  
PePµCђC’PIP°PSPSC- P°PIC,PsC,CђP°PSC’PïPsCђC,PsPj P°P±Ps CђPsP±PsC,C- P· C-PSCëPëPjPë  
PjPµC...P°PSC-P·PjP°PjPë.

***PŸPïPsC’C-P± P·P°C’C,PsC’C’PIP°PSPSC¶ C,P° PrPsP·Pë.***

*PŸPïPsC’C-P± P·P°C’C,PsC’C’PIP°PSPSC¶*

P»C-PeP°CђC’CHPePëPNë P·P°C’C-P± PïCђPëP·PSP°C†PµPSPëPNë PrP»C¶  
PïPµCђPsCђP°P»CHPSPsPiPs P·P°C’C,PsC’C’PIP°PSPSC¶. PµPsP¶PSP°  
P·P°C’C,PsC’PsPIC’PIP°C,Pë PSPµP·P°P»PµP¶PSPs PIC-Pr PïCђPëPNëPsPjĆ C—P¶C-.

*P”PsP·C’PIP°PSPSC¶*

*P”PsCђPsC’P»C- C,P° PïP°C†C-C”PSC,Pë P»C-C,PSCHPsPiPs PIC-PeC’*

P»C-PeP°CђC’CHPePëPNë P·P°C’C-P± PµP»PhP’PhPŸPµ, PePsPjP±C-PSPsPIP°PSPëPNë  
PïCђPµPïP°CђP°C, C,,C-PeC’PsPIP°PSPëC... PrPsP·, P·P°C’C,PsC’PsPIC’CђC,CH PïC-C’P»C¶  
C,PsPiPs, C¶Pe CђPsP·PïPsC†P°C,Ps P»C-PeC’PIP°PSPSC¶ PeP»PsPïC-PrPsPiCђPµP»PµPj C,P°  
P°C†PµC,PëP»C’P°P»C-C†PëP»PsPIPsCђ PePëC’P»PsC,PsCђ Ć PIPëPiP»C¶PrC-  
PsPeCђPµPjPëC... PïCђPµPïP°CђP°C,C-PI. P»C-PeP°CђC’CHPePëPNë P·P°C’C-P±  
PµP»PhP’PhPŸPµ PïCђPëP·PSP°C†P°CђC,CH 1 CђP°P· PSP° PrPsP±Ć.

$P_{\mu}P^{\circ}C\uparrow C-C''PSC, P\ddot{e} P \cdot P_iPsC\uparrow C, C\uparrow P\ddot{e}P_j P_ePsC\uparrow P_sPSP^{\circ}C\uparrow P\ddot{e}P_j C\uparrow P\ddot{e}PSP_rC\uparrow P_sP_jPsP_j P\pm P_{\mu}P \cdot$   
 $P\ddot{i}C-PrPN_ePsP_jC\acute{z} C\uparrow P_{\mu}P_iP_jP_{\mu}PSC, P^{\circ} ST (PSP_{\mu}C\uparrow C, P^{\circ}P\pm C-P\gg CH\ddot{B}PSP^{\circ} C\uparrow C, P_{\mu}PSP_sPeP^{\circ}C\uparrow PrC-C\uparrow$   
 $P^{\circ}P\pm Ps C-PSC, P^{\circ}C\uparrow PeC, P_jC-P_sPeP^{\circ}C\uparrow PrP^{\circ} P\pm P_{\mu}P \cdot P\ddot{i}P^{\circ}C, PsP\gg PsP_iC-C\ddot{z}PSP_sP_iPs P \cdot C\acute{z}P\pm C\uparrow C\uparrow Q)$

$P_hP\ddot{i}C, P\ddot{e}P_jP^{\circ}P\gg CH\ddot{B}PSC_r C, C\uparrow P\ddot{e}PIP^{\circ}P\gg C-C\uparrow C, CH P\gg C-PeC_rPIP^{\circ}PSPSC\uparrow$   
 $PsC, C-C\uparrow C-PN_ePSP_s PSP_{\mu} PIC\uparrow C, P^{\circ}PSP_sPIP\gg P_{\mu}PSP^{\circ} . P''P^{\circ}PSC- PeP\gg C-PSC-C\ddot{z}PSP\ddot{e}C...$   
 $PrPsC\uparrow P\gg C-PrP\uparrow P_{\mu}PSC\ddot{H} C\uparrow PIC-PrC\ddot{z}P^{\circ}C, CH PSP^{\circ} PePsC\uparrow P\ddot{e}C\uparrow C, CH$   
 $P \cdot P^{\circ}C\uparrow C, PsC\uparrow C_rPIP^{\circ}PSPSC\uparrow P\ddot{i}C\uparrow P_{\mu}P\ddot{i}P^{\circ}C\uparrow P^{\circ}C, C_r PrPs 12 P_jC-C\uparrow C\uparrow C\uparrow C\uparrow C-PI,$   
 $P_jP^{\circ}PeC\uparrow P\ddot{e}P_jP^{\circ}P\gg CH\ddot{B}PSP\ddot{e}PN_e P\ddot{i}PsP \cdot P\ddot{e}C, P\ddot{e}PIPSP\ddot{e}PN_e P_{\mu}C, P_{\mu}PeC,$   
 $C\uparrow P\ddot{i}PsC\uparrow C, P_{\mu}C\uparrow C-P_iP^{\circ}PIC\uparrow C\uparrow C\ddot{z}P_{\mu}C\uparrow P_{\mu}P \cdot 3 P_jC-C\uparrow C\uparrow C\uparrow C\uparrow C\uparrow C\uparrow C (PrP\ddot{e}PI. C\uparrow PsP \cdot PrC-P\gg$   
 $B\ll P\alpha P^{\circ}C\uparrow P_jP^{\circ}PePsP\gg PsP_iC-C\ddot{z}PSC- PIP\gg P^{\circ}C\uparrow C, P\ddot{e}PIP_sC\uparrow C, C-B\gg). PJ C\uparrow P^{\circ}P \cdot C-$   
 $P\ddot{i}C\uparrow P\ddot{e}P\ddot{i}P\ddot{e}PSP_{\mu}PSPSC\uparrow P \cdot P^{\circ}C\uparrow C, PsC\uparrow C_rPIP^{\circ}PSPSC\uparrow P\gg C-PeP^{\circ}C\uparrow C\uparrow CH\ddot{B}PePsP_iPs$   
 $P \cdot P^{\circ}C\uparrow PsP\pm C_r P_{\mu}P\gg P_hP'P_hP\ddot{y}P_{\mu} P\ddot{i}P^{\circ}C\uparrow C-C''PSC, P^{\circ}P_j P_jPsP\uparrow P_{\mu} P\pm C_rC, P\ddot{e}$   
 $PePsC\uparrow P\ddot{e}C\uparrow PSP_s P\ddot{i}C\uparrow PsPrPsPIP\uparrow P_{\mu}PSPSC\uparrow P\gg C-PeC_rPIP^{\circ}PSPSC\uparrow C-P \cdot$   
 $P \cdot P^{\circ}C\uparrow C, PsC\uparrow C_rPIP^{\circ}PSPSC\uparrow P_j PsPrPSP_sP_iPs P^{\circ}PSC, P\ddot{e}C, C\uparrow PsP_jP\pm PsC, P\ddot{e}C\ddot{z}PSP_sP_iPs$   
 $P\gg C-PeP^{\circ}C\uparrow C\uparrow CH\ddot{B}PePsP_iPs P \cdot P^{\circ}C\uparrow PsP\pm C_r.$

$P_{\mu}P^{\circ}C\uparrow C-C''PSC, P\ddot{e} P \cdot P_iPsC\uparrow C, C\uparrow P\ddot{e}P_j C-PSC, P^{\circ}C\uparrow PeC, PsP_j P_jC-P_sPeP^{\circ}C\uparrow PrP^{\circ} P \cdot$   
 $P\ddot{i}C-PrPN_ePsP_jPsP_j C\uparrow P_{\mu}P_iP_jP_{\mu}PSC, P^{\circ} ST$

$P\gg C-PeC_rPIP^{\circ}PSPSC\uparrow C\uparrow P\gg C-Pr C\uparrow PsP \cdot P\ddot{i}PsC\ddot{z}P\ddot{e}PSP^{\circ}C, P\ddot{e} C\uparrow PePsP_jPsP_iP^{\circ}$   
 $C\uparrow P^{\circ}PSC-C\epsilon P_{\mu} P\ddot{i}C-C\uparrow P\gg C\uparrow P\ddot{i}PsC\uparrow PIP\ddot{e} C\uparrow P\ddot{e}P_jP\ddot{i}C, PsP_jC-PI C, P^{\circ}$   
 $P\ddot{i}C\uparrow PsPrPsPIP\uparrow C_rPIP^{\circ}C, P\ddot{e} P\ddot{i}C\uparrow PsC, C\uparrow P_iPsP_j C\%PsPSP^{\circ}PN_eP_jP_{\mu}PSC\epsilon P_{\mu} 4$   
 $C, P\ddot{e}P\uparrow PSC-PI. P_{\mu}P_{\mu}C\uparrow P_{\mu}PIP^{\circ}P\ddot{i}P\ddot{e} P \cdot P^{\circ}C\uparrow C, PsC\uparrow C_rPIP^{\circ}PSPSC\uparrow PePsP_jP\pm C-PSP^{\circ}C\uparrow C-C-$   
 $P^{\circ}C\uparrow P_{\mu}C, P\ddot{e}P\gg C\uparrow P^{\circ}P\gg C-C\uparrow P\ddot{e}P\gg PsPIP_sC- PeP\ddot{e}C\uparrow P\gg PsC, P\ddot{e} C, P^{\circ}$   
 $PeP\gg PsP\ddot{i}C-PrPsP_iC\uparrow P_{\mu}P\gg C\uparrow P\ddot{i}C\uparrow PsC, C\uparrow P_iPsP_j P\pm C-P\gg CH\ddot{B}C\epsilon P_{\mu} PSC-P\uparrow 4 C, P\ddot{e}P\uparrow PSC-$   
 $P \cdot P^{\circ} PSP^{\circ}C\uparrow PIPSP_sC\uparrow C, C- C, P^{\circ}PePsP_iPs C\uparrow C, P^{\circ}PSC_r PSP_{\mu} PIP\ddot{e}PIC\ddot{z}P^{\circ}P\gg P\ddot{e}C\uparrow C\uparrow (PrP\ddot{e}PI.$   
 $C\uparrow PsP \cdot PrC-P\gg B\ll P\alpha P^{\circ}C\uparrow P_jP^{\circ}PePsP\gg PsP_iC-C\ddot{z}PSC- PIP\gg P^{\circ}C\uparrow C, P\ddot{e}PIP_sC\uparrow C, C-B\gg). PJ$   
 $C\uparrow P^{\circ}P \cdot C- P\ddot{i}C\uparrow P\ddot{e}P\ddot{i}P\ddot{e}PSP_{\mu}PSPSC\uparrow P \cdot P^{\circ}C\uparrow C, PsC\uparrow C_rPIP^{\circ}PSPSC\uparrow$   
 $P\gg C-PeP^{\circ}C\uparrow C\uparrow CH\ddot{B}PePsP_iPs P \cdot P^{\circ}C\uparrow PsP\pm C_r P_{\mu}P\gg P_hP'P_hP\ddot{y}P_{\mu} P\ddot{i}P^{\circ}C\uparrow C-C''PSC, P^{\circ}P_j$   
 $P_jPsP\uparrow P_{\mu} P\pm C_rC, P\ddot{e} PePsC\uparrow P\ddot{e}C\uparrow PSP_s P\ddot{i}C\uparrow PsPrPsPIP\uparrow P_{\mu}PSPSC\uparrow P\gg C-PeC_rPIP^{\circ}PSPSC\uparrow$   
 $C-P \cdot P \cdot P^{\circ}C\uparrow C, PsC\uparrow C_rPIP^{\circ}PSPSC\uparrow P_j PsPrPSP_sP_iPs P^{\circ}PSC, P\ddot{e}C, C\uparrow PsP_jP\pm PsC, P\ddot{e}C\ddot{z}PSP_sP_iPs$   
 $P\gg C-PeP^{\circ}C\uparrow C\uparrow CH\ddot{B}PePsP_iPs P \cdot P^{\circ}C\uparrow PsP\pm C_r.$

$PJ C\uparrow P^{\circ}P \cdot C- P\ddot{i}C\uparrow PsP\ddot{i}C_rC\uparrow PeC_r PrPsP \cdot P\ddot{e}:$

-  $C\uparrow PeC\%Ps P \cdot P_jPsP_jP_{\mu}PSC, C_r, PePsP\gg P\ddot{e} P\ddot{i}PsC, C\uparrow P-P\pm PSP_s P\pm C_rP\gg Ps P\ddot{i}C\uparrow P\ddot{e}PN_eP_jP^{\circ}C, P\ddot{e}$   
 $C\ddot{z}P_{\mu}C\uparrow P\ddot{i}PsPIC_r PrPsP \cdot C_r, P_jP\ddot{e}PSC_rP\gg Ps P_jP_{\mu}PSC\epsilon P_{\mu} 12 P\ddot{i}PsPrP\ddot{e}PS, P\ddot{i}P^{\circ}C\uparrow C-C''PSC, P_jP^{\circ}C''$   
 $PSP_{\mu}P\ddot{i}P^{\circ}PN_ePSP_s P\ddot{i}C\uparrow P\ddot{e}PN_ePSC\uparrow C, P\ddot{e} P\ddot{i}C\uparrow PsP\ddot{i}C_rC\%P_{\mu}PSC_r PrPsP \cdot C_r, P^{\circ} PSP^{\circ}C\uparrow C, C_rP\ddot{i}PSC_r$   
 $PrPsP \cdot C_r PIP\uparrow P_{\mu} P\ddot{i}C\uparrow P\ddot{e}PN_eP_jP^{\circ}C, P\ddot{e} C_r P \cdot PIP\ddot{e}C\ddot{z}PSP\ddot{e}PN_e C\ddot{z}P^{\circ}C\uparrow;$

-  $C\uparrow PeC\%Ps P_jP\ddot{e}PSC_rP\gg Ps P\pm C-P\gg CH\ddot{B}C\epsilon P_{\mu} 12 P\ddot{i}PsPrP\ddot{e}PS, P\ddot{i}P^{\circ}C\uparrow C-C''PSC, P_jP^{\circ}C''$   
 $P\ddot{i}C\uparrow P\ddot{e}PN_ePSC\uparrow C, P\ddot{e} PSP^{\circ}C\uparrow C, C_rP\ddot{i}PSC_r PrPsP \cdot C_r PI P \cdot PIP\ddot{e}C\ddot{z}PSP\ddot{e}PN_e P \cdot P^{\circ}P\ddot{i}P\gg P^{\circ}PSP_sPIP^{\circ}PSP\ddot{e}PN_e$   
 $C\ddot{z}P^{\circ}C\uparrow, PSP_{\mu} P\ddot{i}PsPrPIP_sC\uparrow C\uparrow C\ddot{z}P\ddot{e} PrPsP \cdot C_r.$

$P\alpha P^{\circ}C\uparrow P_jP^{\circ}PePsP_iP_{\mu}PSP_{\mu}C, P\ddot{e}PeP^{\circ}$

$P-PSP\ddot{e}P\uparrow P_{\mu}PSP\ddot{e}PN_e CYP2C19-PsP\ddot{i}PsC\uparrow P_{\mu}C\uparrow P_{\mu}PrPePsPIP^{\circ}PSP\ddot{e}PN_e$   
 $P_jP_{\mu}C, P^{\circ}P\pm PsP\gg C-P \cdot P_j P \cdot C_rP_jPsPIP\gg C\uparrow C'' P \cdot P_jP_{\mu}PSC\epsilon P_{\mu}PSPSC\uparrow P_{\mu}C, P_{\mu}PeC, C_r PrC-C-$   
 $PeP\gg PsP\ddot{i}C-PrPsP_iC\uparrow P_{\mu}P\gg C\uparrow. P_hP\ddot{i}C, P\ddot{e}P_jP^{\circ}P\gg CH\ddot{B}PSP_sP_iPs C\uparrow P_{\mu}P\uparrow P\ddot{e}P_jC_r$

PrPsP·CfPIP°PSPSCЦ PrP»CЦ PïP°C†C-C"PSC,C-PI P·C- P·PSPëP¶PµPSPëPj  
PjPµC,P°P±PsP»C-P·PjPsPj PSPµ PIPëP·PSP°C‡PµPSPs (PrPëPI. CђPsP·PrC-P»  
B«PαP°CђPjP°PePsPeC-PSPµC,PëPeP°B»).

*PкPëCђPePsPIP° PSPµPrPsCfC,P°C,PSC-CfC,CH*

P>C-PeP°CђCfCHPePëPNë P·P°CfC-P± PльP>PhP'PђPŸPль PïCђPsC,PëPïPsPeP°P·P°PSPs  
P·P°CfC,PsCfPsPICfPIP°C,Pë PïP°C†C-C"PSC,P°Pj P· C,ЦIP¶PePsCђ PSPëCђPePsPIPsCђ  
PSPµPrPsCfC,P°C,PSC-CfC,Cђ (PrPëPI. CђPsP·PrC-P»  
B«PµCђPsC,PëPïPsPeP°P·P°PSPSCЦB»). PŸPµCђP°PïPµPIC,PëC‡PSPëPNë PrPsCfPIC-Pr  
P·P°CfC,PsCfCfPIP°PSPSCЦ PePsPjP±C-PSP°C†C-C—  
P°C†PµC,PëP»CfP°P»C-C†PëP»PsPIP° PePëCfP»PsC,P°/PeP»PsPïC-PrPsPiCђPµP»CH  
PïP°C†C-C"PSC,P°Pj P· P»PµPiPePëPj P°P±Ps PïPsPjC-CђPSPëPj PïPsCђCfC€PµPSPSCЦPj  
C,,CfPSPeC†C-C— PSPëCђPsPe PsP±PjPµP¶PµPSPëPNë (PrPëPI. CђPsP·PrC-P»  
B«PhCfPsP±P»PëPIPsCfC,C- P·P°CfC,PsCfCfPIP°PSPSCЦB»). PhC,P¶Pµ, C,P°PePëPj  
PïP°C†C-C"PSC,P°Pj P»C-PeP°CђCfCHPePëPNë P·P°CfC-P± PльP>PhP'PђPŸPль CfP»C-Pr  
PïCђPëP·PSP°C‡P°C,Pë P· PsP±PµCђPµP¶PSC-CfC,Cђ.

*PµPµC‡C-PSPePsPIP° PSPµPrPsCfC,P°C,PSC-CfC,CH*

P>C-PeP°CђCfCHPePëPNë P·P°CfC-P± PльP>PhP'PђPŸPль PïCђPsC,PëPïPsPeP°P·P°PSPs  
P·P°CfC,PsCfPsPICfPIP°C,Pë PïP°C†C-C"PSC,P°Pj P· C,ЦIP¶PePsCђ  
PïPµC‡C-PSPePsPIPsCђ PSPµPrPsCfC,P°C,PSC-CfC,Cђ (PrPëPI. CђPsP·PrC-P»  
B«PµCђPsC,PëPïPsPeP°P·P°PSPSCЦB»). PŸPµCђP°PïPµPIC,PëC‡PSPëPNë PrPsCfPIC-Pr  
P·P°CfC,PsCfCfPIP°PSPSCЦ PïP°C†C-C"PSC,P°Pj C-P· P·P°C...PIPsCђCђPIP°PSPSCЦPjPë  
PïPµC‡C-PSPePë PïPsPjC-CђPSPsC— C,ЦIP¶PePsCfC,C- C,P° PjPsP¶P»PëPIC-CfC,Cђ  
PIPëPSPëPePSPµPSPSCЦ PïPµPjPsCђP°PiC-C‡PSPsPiPs PrC-P°C,PµP·Cf  
PsP±PjPµP¶PµPSPëPNë (PrPëPI. CђPsP·PrC-P» B«PhCfPsP±P»PëPIPsCfC,C-  
P·P°CfC,PsCfCfPIP°PSPSCЦB»).

PhC,P¶Pµ, C,P°PePëPj PïP°C†C-C"PSC,P°Pj P»C-PeP°CђCfCHPePëPNë P·P°CfC-P±  
PльP>PhP'PђPŸPль CfP»C-Pr PïCђPëP·PSP°C‡P°C,Pë P· PsP±PµCђPµP¶PSC-CfC,Cђ.

*P"C-C,Pë.*

P'PµP·PïPµPeP° C,P° PµC,,PµPeC,PëPIpsc-CfC,CH P·P°CfC,PsCfCfPIP°PSPSCЦ  
PePsPjP±C-PSP°C†C-C— P°C†PµC,PëP»CfP°P»C-C†PëP»PsPIP°  
PePëCfP»PsC,P°/PeP»PsPïC-PrPsPiCђPµP»CH PrC-C,ЦIPj (PIC-PePsPj PrPs 18 CђPsPeC-PI)  
PSPµ PICfC,P°PSPsPIP»PµPSC-. PкPµ CђPµPePsPjPµPSPrCfC"C,CHCfCЦ PïCђPëP·PSP°C‡P°C,Pë  
P»C-PeP°CђCfCHPePëPNë P·P°CfC-P± PльP>PhP'PђPŸPль C†C-PNë PïCђCfPïC-  
PïP°C†C-C"PSC,C-PI.

***PµPµCђPµPrPsP·CžPIP°PSPSCЦ.***

*PђC†PµC,PëP»CfP°P»C-C†PëP»PsPIP° PePëCfP»PsC,P°*



$$\begin{aligned} & \text{P}_\text{b}\text{C}_\text{H}\text{P}_\text{s}\text{P}_\text{i}\text{P}_\text{s}\text{C}, \text{P}_\text{u}\text{C}\ddagger\text{P}^\circ\text{C}''\text{PSP}^\circ\text{PN}_\text{e}\text{P}\pm\text{C}-\text{P}\gg\text{CHBC}\epsilon\text{P}\ddot{\text{P}}_\text{s}\text{C}\epsilon\text{P}\ddot{\text{e}}\text{C}_\text{H}\text{P}_\text{u}\text{PSP}_\text{s}\text{C}_\text{H}\text{P}\ddot{\text{P}}_\text{s}\text{P}\pm\text{C}-\text{C}\ddagger\text{PSP}_\text{s}\text{C}_\text{H} \\ & \text{C}_\text{H}\text{P}_\text{u}\text{P}^\circ\text{PeC}\dagger\text{C}-\text{C}''\text{C}_\text{H}, \text{P}\ddot{\text{C}}_\text{H}\text{P}_\text{s}\text{C}\text{UPE}\epsilon\text{C}\acute{\text{r}}\text{P}\ddot{\text{P}}_\text{s}\text{PIC}-\text{PrP}_\text{s}\text{P}\ddot{\text{P}}\gg\text{C}\text{UPE}\gg\text{PsC}\acute{\text{r}}\text{C}\text{U}\text{C}\text{UPE}\text{P}\ddot{\text{P}}\text{C}-\text{Pr}\text{C}\ddagger\text{P}^\circ\text{C}\acute{\text{r}} \end{aligned}$$

PrPsCfP»C-PrP¶PµPSCb, C,P°Pe C- Cr PīPsCfC,PjP°CḡPePµC,PēPSPiPsPIPsPjCr  
PīPµCḡC-PsPrC-, PI PsCfPSPsPIPsPjCr PīCḡPsC,CḡPiPsPj PīPµCḡC€PsPiPs PjC-CfCḡCḡCḡ  
P»C-PeCrPIP°PSPSCḡ.

PµC-Pr C‡P°Cf PrPsCfP»C-PrP¶PµPSPSCḡ CAPRIE, Cr PīP°C†C-C"°PSC,C-PI, CḡPeC-  
PsC,CḡPēPjCrPIP°P»Pē P°P±Ps PeP»PsPīC-PrPsPīCḡPµP»Cḡ, P°P±Ps  
P°C†PµC,PēP»CfP°P»C-C†PēP»PsPICr PePēCfP»PsC,Cr, P·P°PiP°P»CḡPSP° C‡P°CfC,PsC,P°  
PeCḡPsPIPsC,PµC‡ CfPeP»P°P»P° 9,3 %. PḡP°CfC,PsC,P° C,CḡP¶PePēC... PIPēPīP°PrPeC-PI  
P±CfP»P° PsPrPSP°PePsPIPsCḡ Cr CḡP°P·C- P·P°CfC,PsCfCfPIP°PSPSCḡ CḡPe  
PeP»PsPīC-PrPsPīCḡPµP»Cḡ, C,P°Pe C- P°C†PµC,PēP»CfP°P»C-C†PēP»PsPIPsC—  
PePēCfP»PsC,Pē.

PJ PrPsCfP»C-PrP¶PµPSPSC- CURE PSPµ P±CfP»Ps PIPēCḡPIP»PµPSPs PSP°PrPjC-CḡPSPsC—  
PeC-P»CḡPePsCfC,C- PIPµP»PēPePēC... PeCḡPsPIPsC,PµC‡ PīCḡPē PīCḡPēP·PSP°C‡PµPSPSC-  
PePsPjP±C-PSP°C†C-C— P°C†PµC,PēP»CfP°P»C-C†PēP»PsPIP°  
PePēCfP»PsC,P°/PeP»PsPīC-PrPsPīCḡPµP»Cḡ PīCḡPsC,CḡPiPsPj 7 PrPSC-PI PīC-CfP»Cḡ  
PePsCḡPsPSP°CḡPSPsPiPs C€CrPSC,CfPIP°PSPSCḡ Cr PīP°C†C-C"°PSC,C-PI, CḡPeC-  
PīCḡPēPīPēPSPēP»Pē C,PµCḡP°PīC-Cḡ P±C-P»CḡC€ PSC-P¶ P·P° 5 PrPSC-PI PrPs  
PsPīPµCḡP°C†C-C—. PJ PīP°C†C-C"°PSC,C-PI, CḡPeC- PīCḡPsPrPsPIP¶PēP»Pē C,PµCḡP°PīC-Cḡ  
PīCḡPsC,CḡPiPsPj 5 PrPSC-PI PīC-CfP»Cḡ C€CrPSC,CfPIP°PSPSCḡ, C‡P°CfC,PsC,P°  
PīPsPrC-PNḡ CfPeP»P°P»P° 9,6 % PīCḡPē C,PµCḡP°PīC-C— PePsPjP±C-PSP°C†C-C"°Cḡ  
P°C†PµC,PēP»CfP°P»C-C†PēP»PsPIP° PePēCfP»PsC,P°/PeP»PsPīC-PrPsPīCḡPµP»Cḡ C-  
B B B B B B B B B B B B B B 6,3 % PrP»Cḡ PePsPjP±C-PSP°C†C-C—  
PīP»P°C†PµP±Ps/P°C†PµC,PēP»CfP°P»C-C†PēP»PsPIP° PePēCfP»PsC,P°.

PJ PrPsCfP»C-PrP¶PµPSPSC- CLARITY CfPīPsCfC,PµCḡC-PiP°P»PsCfCḡ P·P°PiP°P»CḡPSPµ  
P·P±C-P»CḡC€PµPSPSCḡ PeC-P»CḡPePsCfC,C- PeCḡPsPIPsC,PµC‡ Cr PīCḡCfPīC-  
PeP»PsPīC-PrPsPīCḡPµP»Cḡ C,P° P°C†PµC,PēP»CfP°P»C-C†PēP»PsPIPsC— PePēCfP»PsC,Pē Cr  
PīPsCḡC-PIPsCḡPSPSC- P· PīCḡCfPīPsCḡ, CḡPeP° PīCḡPēPNḡPjP°P»P°  
P°C†PµC,PēP»CfP°P»C-C†PēP»PsPICr PePēCfP»PsC,Cr CḡPe PjPsPSPsC,PµCḡP°PīC-Cḡ.  
PḡP°CfC,PsC,P° PjP°CfPēPIPsPēC... PeCḡPsPIPsC,PµC‡ P±CfP»P° PsPrPSP°PePsPIPsCḡ PI  
PsP±PsC... PīCḡCfPīP°C.... PīC- PrP°PSC- C"° PsPrPSPsCḡC-PrPSPēPjPē PrP»Cḡ PīC-PrPīCḡCfPī  
PīP°C†C-C"°PSC,C-PI, C...P°CḡP°PeC,PµCḡPēCfC,PēPePē CḡPePēC... P±CfP»Pē  
PIPēP·PSP°C‡PµPSC- PSP° PµC,P°PīC- PIPeP»CḡC‡PµPSPSCḡ PI PrPsCfP»C-PrP¶PµPSPSCḡ, C-  
PrP»Cḡ C,PēPīCr C,,C-P±CḡPēPSPsP»C-C,PēC‡PSPsC— P°P±Ps PīPµPīP°CḡPēPSPsPIPsC—  
C,PµCḡP°PīC-C—.

PJ PrPsCfP»C-PrP¶PµPSPSC- COMMIT, P·P°PiP°P»CḡPSP° C‡P°CfC,PsC,P°  
PSPµC†PµCḡPµP±CḡP°P»CḡPSPēC... PIPµP»PēPePēC... PeCḡPsPIPsC,PµC‡ P°P±Ps  
C†PµCḡPµP±CḡP°P»CḡPSPēC... PeCḡPsPIPsC,PµC‡ P±CfP»P° PSPēP·CḡPePsCḡ C-  
PsPrPSP°PePsPIPsCḡ PI PsP±PsC... PīCḡCfPīP°C....

PkPēP¶C‡Pµ PSP°PIPµPrPµPSC- PrP°PSC- C°PsPrPs PīPsP±C-C‡PSPēC... CḡPµP°PeC†C-PNḡ,  
CḡPeC- PIPēPSPēPeP°P»Pē PīC-Pr C‡P°Cf PjPsPSPsC,PµCḡP°PīC-C—  
PeP»PsPīC-PrPsPīCḡPµP»PµPj, PjPsPSPsC,PµCḡP°PīC-C—  
P°C†PµC,PēP»CfP°P»C-C†PēP»PsPIPsCḡ PePēCfP»PsC,PsCḡ P°P±Ps PīCḡPē  
P·P°CfC,PsCfCfPIP°PSPSC- PePsPjP±C-PSP°C†C-C— P°C†PµC,PēP»CfP°P»C-C†PēP»PsPIP°  
PePēCfP»PsC,P°/PeP»PsPīC-PrPsPīCḡPµP»Cḡ PīC-Pr C‡P°Cf PeP»C-PSC-C‡PSPēC...  
PrPsCfP»C-PrP¶PµPSCb P°P±Ps PīPsPIC-PrPsPjP»PµPSPSCḡ C°PsPrPs CḡPePēC...  
PSP°PrC...PsPrPēP»Pē CfPīPsPSC,P°PSPSPs.

PkPµP±P°P¶P°PSC- CḡPµP°PeC†C-C— PeP»P°CfPēC,,C-PePsPIP°PSC- P·PīC-PrPSPs P·C-

СГР»PSPPIPSPePePsPj CГC,P°PSPPrP°CГC,PeP·PsPIP°PSPsC— PjPμPrPecPSPsC—  
C,PμCГPjC—PSPsP»PsPiC—C— MedDRA P·P° CГPecГC,PμPjP°PjPec PsCГPiP°PSC—P·PjCГ P·  
PSP°CГC,CГPiPSPsCГ CГP°CГC,PsC,PsCГ PIPePSPePePSPμPSPSCГ: CГP°CГC,Ps (PIC—Pr ≥ 1/100  
PrPs < 1/10); PSPμCГP°CГC,Ps (PIC—Pr ≥ 1/1000 PrPs < 1/100); CГC—PrPePs (PIC—Pr ≥ 1/10000  
PrPs < 1/1000); PrCГPГPμ CГC—PrPePs (< 1/10000), CГP°CГC,PsC,P° PSPμPIC—PrPsPjP°  
(PSPμPjPsPГP»PecPiPs PsCГC—PSPec,Pec P·P° PSP°CГPiPSPsCГ C—PSC„PsCГPjP°CГC—CГCГ). P’  
CГP°PjPeP°C... PePsPГPSPsPiPs PeP»P°CГCГ CГPecГC,PμPj PsCГPiP°PSC—PI PiPsP±C—CГPSC—  
CГPμP°PeCГC—C— PiCГPμPrCГC,P°PIP»PμPSC— PI PiPsCГCГPrPeCГ P·PjPμPSCePμPSPSCГ  
CГPμCГPNePsP·PSPsCГC,C—.

P— P±PsPeCз PeCГPsPIC— C,P° P»C—PjC„P°C,PecPSPsC— CГPecГC,PμPjPec: PSPμCГP°CГC,Ps  
bГ“ C,CГPsPjP±PsCГPec,PsPiPμPSC—CГ, P»PμPNePePsPiPμPSC—CГ,  
PμPsP·PecPSPsC„C—P»C—CГ; CГC—PrPePs bГ“ PSPμPNeC,CГPsPiPμPSC—CГ, CГ C,PsPjCГ  
CГPecГP»C— C,CГPГPeP° PSPμPNeC,CГPsPiPμPSC—CГ; PrCГPГPμ CГC—PrPePs bГ“  
C,CГPsPjP±PsC,PecPSP° C,CГPsPjP±PsCГPec,PsPiPμPSC—CГPSP° PiCГCГPiCГCГP°  
(PГPГPμ) (PrPecPi. CГPsP·PrC—P» B«PhCГPsP±P»PecPiPsCГC,C—  
P·P°CГC,PsCГCГPiP°PSPSCГB»), P°PiP»P°CГC,PecPSP° P°PSPμPjC—CГ,  
PiP°PSCГPec,PsPiPμPSC—CГ, P°PiCГP°PSCГP»PsCГPec,PsP·, C,CГPГPeP°  
C,CГPsPjP±PsCГPec,PsPiPμPSC—CГ, PSP°P±CГC,P° PiPμPjPsC„C—P»C—CГ Ph,  
PiCГP°PSCГP»PsCГPec,PsPiPμPSC—CГ, P°PSPμPjC—CГ; CГP°CГC,PsC,P°  
PSPμPIC—PrPsPjP° bГ“ PiPsCГCГCePμPSPSCГ PeC—CГC,PePsPiPs—PjPsP·PePsPiPsPiPs  
PeCГPsPiPsC,PiPsCГPμPSPSCГ\*, P±C—CГPec,PsPiPμPSC—CГ\*, PiPμPjPsP»C—C,PecPSP°  
P°PSPμPjC—CГ CГ PiP°CГC—CГPSC,C—PI P· PrPμC„C—CГPec,PsPj PiP»CГPePsP·Ps-6-  
C„PsCГC„P°C,PrPμPiC—PrCГPsPiPμPSP°P·Pec\* (PrPecPi. CГPsP·PrC—P»  
B«PhCГPsP±P»PecPiPsCГC,C— P·P°CГC,PsCГCГPiP°PSPSCГB»).

P— P±PsPeCз CГPμCГCГPμPiPs—CГCзPrPecPSPSPsC— CГPecГC,PμPjPec: CГP°CГC,PsC,P°  
PSPμPIC—PrPsPjP° bГ“ CГPecPSPPrCГPsPj PμPsCГPSC—CГP° (PiP°P·PsCГPiP°CГC,PecPSP°  
P°P»PμCГPiC—CГPSP° CГC,PμPSPsPeP°CГPrC—CГ/P°P»PμCГPiC—CГPSPePNe  
C—PSC„P°CГPeC, PjC—PsPeP°CГPrP°) PI PePsPSC,PμPeCГC,C— CГPμP°PeCГC—  
PiC—PiPμCГCГCГC,P»PecPiPsCГC,C— PrPs P°CГPμC,Pec»CГP°P»C—CГPec»PsPiPsC—  
PePecГP»PsC,Pec\* P°P±Ps PeP»PsPiC—PrPsPiCГPμP»CГ\*\*.

P— P±PsPeCз C—PjCзPSPSPsC— CГPecГC,PμPjPec: PrCГPГPμ CГC—PrPePs bГ“  
CГPecCГPsPiP°C,PePsPiP° C...PiPsCГPsP±P°, P°PSP°C„C—P»P°PeC,PsC—PrPSC—  
CГPμP°PeCГC—C—, PiPμCГPμC...CГPμCГPSP° PiC—PiPμCГCГCГC,P»PecPiC—CГC,CГ PiPsPjC—PГ  
C,C—CГPSPsPiC—CГPecPrPecPSC—PI (C,P°PePec... CГPe C,PecPeP»PsPiC—PrPecPS,  
PiCГP°CГCГPiCГPμP»CГ) (PrPecPi. CГPsP·PrC—P» B«PhCГPsP±P»PecPiPsCГC,C—  
P·P°CГC,PsCГCГPiP°PSPSCГB»)\*; CГP°CГC,PsC,P° PSPμPIC—PrPsPjP° bГ“  
P°PSP°C„C—P»P°PeC,PecPSPePNe CePsPe\*, PiPsCГPecP»PμPSPSCГ P°P»PμCГPiC—CГPSPec...  
CГPecPjPiC,PsPjC—PI C...P°CГCГPsPiPsC— P°P»PμCГPiC—C—\*, C—PSCГCГP»C—PSPsPiPecPNe  
P°CГC,PsC—PjCГPSPSPePNe CГPecPSPPrCГPsPj, C%Ps PjPsPГPμ PiCГPecP·PiPμCГC,Pec PrPs  
C,CГPГPePsC— PiC—PiPsPiP»C—PePμPjC—C—, PsCГPsP±P»PecPiPs CГ PiP°CГC—CГPSC,C—PI C—P·  
PiC—PrC,PecPiPsPj P°PSC,PecPiPμPSCГ P»PμPNePePsCГPec,C—PI P»CГPrPecPSPe DRA4  
(CГP°CГC,C—CePμ CГ CГPiPsPSCГC—PI)\*\*.

P— P±PsPeCз PjPμC,P°P±PsP»C—P·PjCз C,P° PsP±PjC—PSCз CГPμCГPsPiPecPS: CГP°CГC,PsC,P°  
PSPμPIC—PrPsPjP° bГ“ PiC—PiPsPiP»C—PePμPjC—CГ\*, PiPsPrP°PiCГP°\* (PrPecPi.  
CГPsP·PrC—P» B«PhCГPsP±P»PecPiPsCГC,C— P·P°CГC,PsCГCГPiP°PSPSCГB»).

*P— P±PsPeCž PiCfPëC...C-PePë: PrCfP¶Pµ CĤC-PrPePs бĤ“ PiP°P»CĤC†PëPSP°C†C-C—, CĤPiP»CfC,P°PSC-CĤC,CH CĤPIC-PrPsPjPsCĤC,C-.*

*P— P±PsPeCž PSPµCĤPIPsPIPsC— CĤPëCĤC,PµPjPë: PSPµC†P°CĤC,Ps бĤ“ PIPSCfC,CĤC-CëPSCĤPsC†PµCĤPµPiPSC- PeCĤPsPIPsC,PµC†C- (P·P° PiPsPIC-PrPsPjP»PµPSPSCĤPjPë PrPµCĤPeC- PIPëPiP°PrPePë P±CfP»Pë P»PµC,P°P»CHPSC-), PiPsP»PsPIPsPëPNë P±C-P»CH, PiP°CĤPµCĤC,PµP·C-CĤ, P·P°PiP°PjPsCĤPsC†PµPSPSCĤ; PrCfP¶Pµ CĤC-PrPePs бĤ“ PiPsCĤCfCëPµPSPSCĤ CĤPjP°PePsPIPëC... PIC-PrC†CfC,C,C-PI, P°PiPµPIP·C-CĤ.*

*P— P±PsPeCž PsCĤPiP°PSC-PI P·PsCĤCž: PSPµC†P°CĤC,Ps бĤ“ PsC†PSC- PeCĤPsPIPsPIPëP»PëPIPë (PePsPS'CHPeC,PëPIP°P»CHPSC-, PsPeCfP»CĤCĤPSC-, CĤPµC,PëPSP°P»CHPSC-).*

*P— P±PsPeCž PsCĤPiP°PSC-PI CĤP»CžC...Cž: CĤC-PrPePs бĤ“ PIPµCĤC,PëPiPs, C†P°CĤC,PsC,P° PSPµPIC-PrPsPjP° бĤ“ PIC,CĤP°C,P° CĤP»CfC...Cf\*, PrP·PIC-PS Cf PICfC...P°C...\*.*

*P— P±PsPeCž CĤCžPrPëPS: C†P°CĤC,Ps бĤ“ PiPµPjP°C,PsPjPë, PrCfP¶Pµ CĤC-PrPePs бĤ“ CĤPµCĤPNëPsP·PSC- PeCĤPsPIPsPIPëP»PëPIPë, PeCĤPsPIPsC,PµC†C- P· PsPiPµCĤP°C†C-PNëPSPsC— CĤP°PSPë, PIP°CĤPeCfP»C-C,; PrCfP¶Pµ CĤC-PrPePs бĤ“ PiC-PiPsC,PµPSP·C-CĤ; C†P°CĤC,PsC,P° PSPµPIC-PrPsPjP° бĤ“ PiCfCĤPiCfCĤP° PëPµPSP»PµPNëPSP°бĤ“P”PµPSPsC...P°\*.*

*P— P±PsPeCž CĤPµCĤPiC-CĤP°C,PsCĤPSPsC— CĤPëCĤC,PµPjPë, PsCĤPiP°PSC-PI PiCĤCžPrPSPsC— PeP»C-C,PePë C,P° CĤPµCĤPµPrPsCĤC,C-PSPSCĤ: C†P°CĤC,Ps бĤ“ PSPsCĤPsPIP° PeCĤPsPIPsC,PµC†P°; PrCfP¶Pµ CĤC-PrPePs бĤ“ PeCĤPsPIPsC,PµC†C- P· PrPëC...P°P»CHPSPsPiPs C,CĤP°PeC,Cf (PeCĤPsPIPsC...P°CĤPeP°PSPSCĤ, P»PµPiPµPSPµPIP° PeCĤPsPIPsC,PµC†P°), P±CĤPsPSC...PsCĤPiP°P·Pj, C-PSC,PµCĤCĤC,PëC†C-P°P»CHPSPëPNë PiPSPµPiPjPsPSC-C,, PµPsP·PëPSPsC,,C-P»CHPSP° PiPSPµPiPjPsPSC-CĤ; C†P°CĤC,PsC,P° PSPµPIC-PrPsPjP° бĤ“ PSPµPeP°CĤPrC-PsPiPµPSPSPëPNë PSP°P±CĤCĤPe P»PµPiPµPSCĤ PiCĤPë C,CĤPëPIP°P»PsPjCf P·P°CĤC,PsCĤCfPIP°PSPSC- PiCĤPµPiP°CĤP°C,Cf C,P° Cf CĤP°PjPeP°C... PiC-PiPµCĤC†CfC,P»PëPiPsCĤC,C- PSP° P°C†PµC,PëP»CĤP°P»C-C†PëP»PsPICf PePëCĤP»PsC,Cf\*.*

*P— P±PsPeCž CëP»CžPSPePsPIPs-PePëCëPePsPIPsPiPs C,CĤP°PeC,Cž: C†P°CĤC,Ps бĤ“ CëP»CfPSPePsPIPs-PePëCëPePsPIC- PeCĤPsPIPsC,PµC†C-, PrC-P°CĤPµCĤ, P±C-P»CH Cf P¶PëPiPsC,C-, PrPëCĤPiPµPiCĤC-CĤ; PSPµC†P°CĤC,Ps бĤ“ PIPëCĤP°P·PeP° CëP»CfPSPeCf C,P° PrPIP°PSP°PrC†CĤC,PëPiP°P»PsC— PePëCëPePë, PiP°CĤC,CĤPëC,, P±P»CHPIP°PSPSCĤ, PSCfPrPsC,P°, P·P°PiPsCĤ, P·PrCfC,C,CĤ P¶PëPiPsC,P°; CĤC-PrPePs бĤ“ CĤPµC,CĤPsPiPµCĤPëC,PsPSC-P°P»CHPSC- PeCĤPsPIPsC,PµC†C-; PrCfP¶Pµ CĤC-PrPePs бĤ“ CëP»CfPSPePsPIPs-PePëCëPePsPIC- C,P° CĤPµC,CĤPsPiPµCĤPëC,PsPSC-P°P»CHPSC- PeCĤPsPIPsC,PµC†C- P· P»PµC,P°P»CHPSPëPj PSP°CĤP»C-PrPePsPj, PiP°PSPeCĤPµP°C,PëC,, PePsP»C-C, (Cf C,PsPjCf C†PëCĤP»C- PIPëCĤP°P·PePsPIPëPNë P°P±Ps P»C-PjC,,PsC†PëC,P°CĤPSPëPNë), CĤC,PsPjP°C,PëC,; C†P°CĤC,PsC,P° PSPµPIC-PrPsPjP° бĤ“ CĤPsP·P»P°PrPë P· P±PsPeCf PIPµCĤC...PSC-C... PIC-PrPrC-P»C-PI PëPµPÿ (PµP·PsC,,P°PiC-C,, PIPëCĤP°P·PeP° CĤC,CĤP°PIPsC...PsPrCf, PiPµCĤC,,PsCĤP°C†C-CĤ, PµCĤPsP·PëPIPsPëPNë PiP°CĤC,CĤPëC,, PµCĤPsP·PëPIPsPëPNë PrCfPsPrPµPSC-C,, PiP°CĤC,CĤPsPrCfPsPrPµPSP°P»CHPSP° PIPëCĤP°P·PeP°/PiPµCĤC,,PsCĤP°C†C-CĤ)\*, CĤPsP·P»P°PrPë P· P±PsPeCf PSPëP¶PSC-C... PIC-PrPrC-P»C-PI PëPµPÿ*



(PIPëCĤP°P·PeP° C,PsPSPePsPiPs PePëC€PeC-PIPSPëPeP° (C,PsPSPePsC— PePëC€PePë C,P° PeP»CrP±PsPIPsC— PePëC€PePë) C- C,PsPICÍC,PsPiPs PePëC€PeC-PIPSPëPeP° (PsP±PsPrPsPIPsC— PePëC€PePë C,P° PíCĤCĬPjPsC— PePëC€PePë), PePsP»C-C, C- PíPµCĤC,,PsCĤP°C†C-CĬ PePëC€PeC-PIPSPëPeP°)\*, CÍPëPjPíC,PsPjPë P· P±PsPeCÍ PIPµCĤC...PSC-C... PIC-PrPrC-P»C-PI PëPᵗPᵗ\*, C,P°PeC- CĬPe, P±C-P»CH CÍ C€P»CÍPSPeCÍ (PrPëPI. CĤPsP·PrC-P» B«PhCÍPsP±P»PëPIPsCÍC,C- P·P°CÍC,PsCÍCÍPIP°PSPSCĬB»), PíPsPIᵇĤ™ CĬP·P°PSC- C-P· P·P°CÍC,PsCÍCÍPIP°PSPSCĬPj P°C†PµC,PëP»CÍP°P»C-C†PëP»PsPIPsC— PePëCÍP»PsC,Pë C€P»CÍPSPePsPIPs-PePëC€PePsPIC- CĤPµP°PeC†C-C— PjPsP¶CÍC,CH CÍCÍPíCĤPsPIPsPrP¶CÍPIP°C,PëCÍCĬ (P°P±Ps PSC-) PeCĤPsPIPsC,PµC†PµCĤ C- PjPsP¶CÍC,CH PIPëPSPëPeP°C,Pë PSP° C,,PsPSC- P·P°CÍC,PsCÍCÍPIP°PSPSCĬ P±CÍPrCH-CĬPePsC— PrPsP·Pë P°C†PµC,PëP»CÍP°P»C-C†PëP»PsPIPsC— PePëCÍP»PsC,Pë C- CÍ PíP°C†C-C”PSC,C-PI P· PSP°CĬPIPSC-CÍC,CH P°P±Ps PIC-PrCÍCÍC,PSC-CÍC,CH PíPsPíPµCĤPµPrP¶CÍPIP°P»CHPSPsC— CÍPëPjPíC,PsPjP°C,PëPePë C†Pë CÍPµCĤPNᵇPsP·PSPëC... C€P»CÍPSPePsPIPs- PePëC€PePsPIPëC... PíPsPrC-PNᵇ PI P°PSP°PjPSPµP·C-\*, PíPsCÍC,CĤPëPNᵇ PíP°PSPeCĤPµP°C,PëC, PI CĤP°PjPeP°C... CĤPµP°PeC†C-C— PíC-PíPµCĤC†CÍC,P»PëPIPsCÍC,C- PSP° P°C†PµC,PëP»CÍP°P»C-C†PëP»PsPICÍ PePëCÍP»PsC,CÍ\*.

*P— P±PsPeCž PiPµPíP°C,PsP±C-P»C-P°CĤPSPsC— CÍPëCÍC,PµPjPë: PrCÍP¶Pµ CĤC-PrPePs BĤ“ PíPsCÍC,CĤP° PíPµC†C-PSPePsPIP° PSPµPrPsCÍC,P°C,PSC-CÍC,CH, PíPµPíP°C,PëC,, PIC-PrC...PëP»PµPSPSCĬ PIC-Pr PSPsCĤPjPë P· P±PsPeCÍ PíPsPeP°P·PSPëPeC-PI C,,CÍPSPeC†C-C— PíPµC†C-PSPePë; C†P°CÍC,PsC,P° PSPµPIC-PrPsPjP° BĤ“ CÍCĤP°P¶PµPSPSCĬ PíPµC†C-PSPePë, PíPµCĤPµPIP°P¶PSPs PíPµPíP°C,PsC†PµP»CHP»CĬCĤPSPµ\*, PíC-PrPIPëC%PµPSPSCĬ CĤC-PIPsC-PI PíPµC†C-PSPePsPIPëC... C,,PµCĤPjPµPSC,C-PI\*, C...CĤPsPSC-C†PSPëPNᵇ PíPµPíP°C,PëC,\*.*

*P— P±PsPeCž C€PeC-CĤPë C,P° PíC-PrC€PeC-CĤPSPsC— PeP»C-C,PePsPIPëPSPë: C†P°CÍC,Ps BĤ“ PíPsCĬPIP° CÍPëPSC†C-PI, PSPµC†P°CÍC,Ps BĤ“ PIPëCÍPëPíP°PSPSCĬ, CÍPIPµCĤP±C-P¶, PeCĤPsPIPsPIPëP»PëPIPë CÍ C€PeC-CĤCÍ (PíCÍCĤPíCÍCĤP°); PrCÍP¶Pµ CĤC-PrPePs BĤ“ P±CÍP»CHPsP·PSPëPNᵇ PrPµCĤPjP°C,PëC, (C,PsPeCÍPëC†PSPëPNᵇ PµPíC-PrPµCĤPjP°P»CHPSPëPNᵇ PSPµPeCĤPsP»C-P·, CÍPëPSPrCĤPsPj PŸC,C-PIPµPSCÍP°BĤ“P”P¶PsPSCÍPsPSP°, PjCÍP»CHC,PëC,,PsCĤPjPSP° PµCĤPëC,PµPjP°), PíPsCÍC,CĤPëPNᵇ PíPµPSPµCĤP°P»C-P·PsPIP°PSPëPNᵇ PµPeP·P°PSC,PµPjP°C,PsP·PSPëPNᵇ PíCÍCÍC,CÍP»CHPsP·, P°PSPiC-PsPSPµPICĤPsC,PëC†PSPëPNᵇ PSP°P±CĤCĬPe, PjPµPrPëPeP°PjPµPSC,PsP·PSPëPNᵇ CÍPëPSPrCĤPsPj PíC-PíPµCĤC†CÍC,P»PëPIPsCÍC,C-, PjPµPrPëPeP°PjPµPSC,PsP·PSPµ PIPëCÍPëPíP°PSPSCĬ P· PµPsP·PëPSPsC,,C-P»C-C”CH C,P° CÍPëCÍC,PµPjPSPsCH CÍPëPjPíC,PsPjP°C,PëPePsCH (DRESS-CÍPëPSPrCĤPsPj), PµCĤPëC,PµPjP°C,PsP·PSPµ C†Pë PµPeCÍC,,PsP»C-P°C,PëPIPsPµ PIPëCÍPëPíP°PSPSCĬ, PeCĤPsPíPëPIᵇĤ™ CĬPSPeP°, PµPeP·PµPjP°, C†PµCĤPIPSPSPëPNᵇ PíP»P°CÍPePëPNᵇ P»PëC€P°PNᵇ; C†P°CÍC,PsC,P° PSPµPIC-PrPsPjP° BĤ“ C,,C-PeCÍPsPIP°PSP° PµCĤPëC,PµPjP°\*.*

*P— P±PsPeCž PeC-CÍC,PePsPIPs-Pj’CĬP·PsPIPsC— CÍPëCÍC,PµPjPë: PrCÍP¶Pµ CĤC-PrPePs BĤ“ PeC-CÍC,PePsPIPs-Pj’CĬP·PsPIC- PeCĤPsPIPsPIPëP»PëPIPë (PíPµPjP°CĤC,CĤPsP·), P°CĤC,CĤPëC,, P°CĤC,CĤP°P»PíC-CĬ, PjC-P°P»PíC-CĬ.*

$P - P \pm PsPeC \acute{e} PSP\ddot{e}C\grave{H}PsPe\ C, P^{\circ} C\acute{I}P_{\mu}C \ddagger PsPIP\ddot{e}PrC - P \gg CH\grave{P}SPsC - C\acute{I}P\ddot{e}C\acute{I}C, P_{\mu}PjP\ddot{e}:$   
 $PSP_{\mu}C \ddagger P^{\circ}C\acute{I}C, Ps\ \text{в}\grave{H}''\ PiP_{\mu}PjP^{\circ}C, CrC\grave{H}C - C\grave{I}; PrCrP\grave{I}P_{\mu} C\grave{H}C - PrPePs\ \text{в}\grave{H}''$   
 $PiP \gg PsPjP_{\mu}C\grave{H}CrP \gg PsPSP_{\mu}C, C\grave{H}P\ddot{e}C, PiC - PrPIP\ddot{e}C \% P_{\mu}PSPSC\grave{I} C\grave{H}C - PIPSC\grave{I}$   
 $PeC\grave{H}P_{\mu}P^{\circ}C, P\ddot{e}PSC - PSC\acute{r}\ Pi\ PeC\grave{H}PsPIC -; C \ddagger P^{\circ}C\acute{I}C, PsC, P^{\circ} PSP_{\mu}PIC - PrPsPjP^{\circ}\ \text{в}\grave{H}'' PSP\ddot{e}C\grave{H}PePsPIP^{\circ}$   
 $PSP_{\mu}PrPsC\acute{I}C, P^{\circ}C, PSC - C\acute{I}C, CH^*, PiPsC\acute{I}C, C\grave{H}P^{\circ} PSP\ddot{e}C\grave{H}PePsPIP^{\circ}$   
 $PSP_{\mu}PrPsC\acute{I}C, P^{\circ}C, PSC - C\acute{I}C, CH\ (PsC\acute{I}PsP \pm P \gg P\ddot{e}PIPs\ Cr\ PiP^{\circ}C \dagger C - C''PSC, C - Pi\ P \cdot$   
 $PSP\ddot{e}C\grave{H}PePsPIPsC\grave{H}\ PSP_{\mu}PrPsC\acute{I}C, P^{\circ}C, PSC - C\acute{I}C, C\grave{H}, C\acute{I}P_{\mu}C\grave{H}C \dagger P_{\mu}PIPsC\grave{H}$   
 $PrP_{\mu}PePsPjPiP_{\mu}PSC\acute{I}P^{\circ}C \dagger C - C''C\grave{H}, PSP_{\mu}C, C\grave{H}PsC, P\ddot{e}C \ddagger PSP\ddot{e}Pj\ C\acute{I}P\ddot{e}PSP\ddot{r}C\grave{H}PsPjPsPj\ P^{\circ}P \pm Ps$   
 $PsPrPSPsC \ddagger P^{\circ}C\acute{I}PSP\ddot{e}Pj\ P \cdot P^{\circ}C\acute{I}C, PsC\acute{I}CrPIP^{\circ}PSPSC\grave{I}Pj\ PrC - CrC\grave{H}P_{\mu}C, P\ddot{e}PeC - PI)^*.$

$P - P^{\circ}PiP^{\circ}P \gg CH\grave{P}PSC - C\grave{H}PsP \cdot P \gg P^{\circ}PrP\ddot{e}\ C, P^{\circ} PiPsC\grave{H}C \acute{e}C\epsilon P_{\mu}PSPSC\grave{I} C \acute{e} PjC - C\acute{I}C \dagger C -$   
 $PIPIP_{\mu}PrP_{\mu}PSPSC\grave{I}: C \ddagger P^{\circ}C\acute{I}C, Ps\ \text{в}\grave{H}''\ PeC\grave{H}PsPIPsC, P_{\mu}C \ddagger P^{\circ}\ Pi\ PjC - C\acute{I}C \dagger C -$   
 $P\ddot{e}C\grave{H}PsPePsP \gg C\grave{H}PIP^{\circ}PSPSC\grave{I}; PrCrP\grave{I}P_{\mu} C\grave{H}C - PrPePs\ \text{в}\grave{H}''\ P \gg P\ddot{e}C...PsPjP^{\circ}PSPeP^{\circ};$   
 $C \ddagger P^{\circ}C\acute{I}C, PsC, P^{\circ} PSP_{\mu}PIC - PrPsPjP^{\circ}\ \text{в}\grave{H}''\ PSP^{\circ}P \pm C\grave{H}C\grave{I}PeP\ddot{e}^*.$

$P \gg P^{\circ}P \pm PsC\grave{H}P^{\circ}C, PsC\grave{H}PSC - PiPsPeP^{\circ}P \cdot PSP\ddot{e}PeP\ddot{e}: PSP_{\mu}C \ddagger P^{\circ}C\acute{I}C, Ps\ \text{в}\grave{H}''\ P \cdot P \pm C - P \gg CH\grave{C}\epsilon P_{\mu}PSPSC\grave{I}$   
 $C \ddagger P^{\circ}C\acute{I}Cr\ PeC\grave{H}PsPIPsC, P_{\mu}C \ddagger C -, P \cdot PSP\ddot{e}P\grave{I}P_{\mu}PSPSC\grave{I}\ PeC - P \gg CH\grave{P}ePsC\acute{I}C, C -$   
 $PSP_{\mu}PN\grave{e}C, C\grave{H}PsC, C - P \gg C - PI, P \cdot PSP\ddot{e}P\grave{I}P_{\mu}PSPSC\grave{I}\ PeC - P \gg CH\grave{P}ePsC\acute{I}C, C -$   
 $C, C\grave{H}PsPjP \pm PsC \dagger P\ddot{e}C, C - PI.$

$P - P \pm PsPeC \acute{e} C\grave{H}P_{\mu}PiC\grave{H}PsPrC \acute{e}PeC, P\ddot{e}PIPSPsC - C\acute{I}P\ddot{e}C\acute{I}C, P_{\mu}PjP\ddot{e}: C\grave{H}C - PrPePs\ \text{в}\grave{H}''$   
 $PiC - PSP_{\mu}PePsPjP^{\circ}C\acute{I}C, C - C\grave{I}.$

\*  $B \ll P\grave{S}P^{\circ}C\acute{I}C, PsC, P^{\circ} PSP_{\mu}PIC - PrPsPjP^{\circ}B \gg PIC - PrPiPsPIC - PrP^{\circ}C''\ C - PSC, PsC\grave{H}PjP^{\circ}C \dagger C - C -,$   
 $PSP^{\circ}PIP_{\mu}PrP_{\mu}PSC - PN\grave{e}\ Pi\ PsPiCrP \pm P \gg C - PePsPIP^{\circ}PSP\ddot{e}C... PrP^{\circ}PSP\ddot{e}C... C \% PsPrPs\ P\grave{h}P\grave{Y}P\grave{L}b.$

\*\*  $P \dagger PSC, PsC\grave{H}PjP^{\circ}C \dagger C - C\grave{I}\ C\acute{I}C, PsC\acute{I}PsPIPsPs\ PeP \gg PsPiC - PrPsPiC\grave{H}P_{\mu}P \gg C\grave{H}\ P \cdot$   
 $C \ddagger P^{\circ}C\acute{I}C, PsC, PsC\grave{H}\ B \ll C \ddagger P^{\circ}C\acute{I}C, PsC, P^{\circ} PSP_{\mu}PIC - PrPsPjP^{\circ}B \gg.$

-

$P_{\mu}PsPIC - PrPsPjP \gg P_{\mu}PSPSC\grave{I}\ PiC\grave{H}Ps\ PiPsP \pm C - C \ddagger PSC - C\grave{H}P_{\mu}P^{\circ}PeC \dagger C - C - PiC - C\acute{I}P \gg C\grave{I}$   
 $C\grave{H}P_{\mu}C''C\acute{I}C, C\grave{H}P^{\circ}C \dagger C - C - P \gg C - PeP^{\circ}C\grave{H}C\acute{I}CH\grave{P}ePsPiPs\ P \cdot P^{\circ}C\acute{I}PsP \pm Cr\ PjP^{\circ}C''\ PIP^{\circ}P\grave{I}P \gg P\ddot{e}PIP_{\mu}$   
 $P \cdot PSP^{\circ}C \ddagger P_{\mu}PSPSC\grave{I}. P\grave{I}P_{\mu}\ PrP^{\circ}C''\ P \cdot PjPsPiCr\ PiC\grave{H}PsPIPsPrP\ddot{e}C, P\ddot{e}\ PjPsPSC - C, PsC\grave{H}P\ddot{e}PSPi$   
 $C\acute{I}PiC - PIPIC - PrPSPsC\epsilon P_{\mu}PSPSC\grave{I}\ PePsC\grave{H}P\ddot{e}C\acute{I}C, CH/C\grave{H}P\ddot{e}P \cdot P\ddot{e}Pe\ PiC\grave{H}P\ddot{e}$   
 $P \cdot P^{\circ}C\acute{I}C, PsC\acute{I}CrPIP^{\circ}PSPSC - C \dagger CH\grave{P}ePsPiPs\ P \gg C - PeP^{\circ}C\grave{H}C\acute{I}CH\grave{P}ePsPiPs\ P \cdot P^{\circ}C\acute{I}PsP \pm Cr.$   
 $P\grave{H}P_{\mu}PrP\ddot{e}C \ddagger PSP\ddot{e}Pj\ C, P^{\circ} C, P^{\circ}C\grave{H}PjP^{\circ}C \dagger P_{\mu}PIC, P\ddot{e}C \ddagger PSP\ddot{e}Pj\ PiC\grave{H}P^{\circ}C \dagger C - PIPSP\ddot{e}PeP^{\circ}Pj, P^{\circ}$   
 $C, P^{\circ}PePsP\grave{I}\ PiP^{\circ}C \dagger C - C''PSC, P^{\circ}Pj\ P^{\circ}P \pm Ps\ C - C... P \cdot P^{\circ}PePsPSPSP\ddot{e}Pj$   
 $PiC\grave{H}P_{\mu}PrC\acute{I}C, P^{\circ}PIPSP\ddot{e}PeP^{\circ}Pj\ C\acute{I}P \gg C - Pr\ PiPsPIC - PrPsPjP \gg C\grave{I}C, P\ddot{e}\ PiC\grave{H}Ps\ CrC\acute{I}C -$   
 $PIP\ddot{e}PiP^{\circ}PrPeP\ddot{e}\ PiC - PrPsP \cdot C\grave{H}C\grave{H}PIP^{\circ}PSP\ddot{e}C... PiPsP \pm C - C \ddagger PSP\ddot{e}C... C\grave{H}P_{\mu}P^{\circ}PeC \dagger C - PN\grave{e}\ C, P^{\circ}$   
 $PIC - PrC\acute{I}CrC, PSPsC\acute{I}C, C - P_{\mu}C, P_{\mu}PeC, P\ddot{e}PIPSPsC\acute{I}C, C - P \gg C - PeP^{\circ}C\grave{H}C\acute{I}CH\grave{P}ePsPiPs$   
 $P \cdot P^{\circ}C\acute{I}PsP \pm Cr\ C \ddagger P_{\mu}C\grave{H}P_{\mu}P \cdot P\grave{h}PIC, PsPjP^{\circ}C, P\ddot{e}P \cdot PsPIP^{\circ}PSC\acute{r}\ C - PSC, PsC\grave{H}PjP^{\circ}C \dagger C - PN\grave{e}PSC\acute{r}$   
 $C\acute{I}P\ddot{e}C\acute{I}C, P_{\mu}PjCr\ P \cdot C, P^{\circ}C\grave{H}PjP^{\circ}PePsPSP^{\circ}PiP \gg C\grave{I}PrCr\ P \cdot P^{\circ}\ PiPsC\acute{I}P\ddot{e}P \gg P^{\circ}PSPSC\grave{I}Pj:$   
<https://aisf.dec.gov.ua/>.

$P_{\mu}PsPIC - PrPsPjP\ddot{e}C, P\ddot{e}\ PiC\grave{H}Ps\ PSP_{\mu}P \pm P^{\circ}P\grave{I}P^{\circ}PSP_{\mu}\ C\grave{I}PIP\ddot{e}C \% P_{\mu}\ PiC\grave{H}P\ddot{e}$   
 $P \cdot P^{\circ}C\acute{I}C, PsC\acute{I}CrPIP^{\circ}PSPSC - P \gg C - PeP^{\circ}C\grave{H}C\acute{I}CH\grave{P}ePsPiPs\ P \cdot P^{\circ}C\acute{I}PsP \pm Cr\ PjPsP\grave{I}PSP^{\circ}\ P \cdot P^{\circ}$   
 $C, P_{\mu}P \gg P_{\mu}C, PsPSPsPj\ 38(050)\ 309-83-54\ (C \dagger C - P \gg PsPrPsP \pm PsPIPs).$

***PŷPµCḡPjC-PS PïCḡPëPrP°C,PSPsCÍC,C-.***

2 CḡPsPePë.

**PJPjPsPIPë P·P±PµCḡC-PiP°PSPSCII.**

P—P±PµCḡC-PiP°C,Pë PïCḡPë C,PµPjPïPµCḡP°C,CÍCḡC- PSPµ PIPëC‰Pµ 25 B°Pŷ PI PsCḡPëPiC-PSP°P»CḤPSC-PN̄ CÍPïP°PePsPIC†C-.

P—P±PµCḡC-PiP°C,Pë CÍ PSPµPrPsCÍC,CÍPïPSPsPjCÍ PrP»CII PrC-C,PµPN̄ PjC-CÍC†C-.

**PJPïP°PePsPIPeP°.**

PµPs 7 PeP°PïCÍCÍP» CÍ P±P»C-CÍC,PµCḡC-, PïPs 4 P±P»C-CÍC,PµCḡPë CÍ PïP°C‡C†C- P· PeP°CḡC,PsPSCÍ.

PḡP±Ps PïPs 7 PeP°PïCÍCÍP» CÍ P±P»C-CÍC,PµCḡC-, PïPs 8 P±P»C-CÍC,PµCḡC-PI CÍ PïP°C‡C†C- P· PeP°CḡC,PsPSCÍ.

PḡP±Ps PïPs 28 PeP°PïCÍCÍP» CÍ P±P°PSC†C-, PïPs 1 P±P°PSC†C- CÍ PïP°C‡C†C- P· PeP°CḡC,PsPSCÍ.

**PḡP°C,PµPiPsCḡC-CII PIC-PrPïCÍCÍPeCÍ.**

P—P° CḡPµC†PµPiC,PsPj.

**B P’PëCḡPsP±PSPëPe.**

PŷPḡP’ PḡP’Pα B«PḡP†PḡP PḡPΓP†PḡB» (PIPëCḡPsP±PSPëC‡P° PrC-P»CḤPSPëC†CII)

**PḡC-CÍC†PµP·PSP°C...PsPrP¶PµPSPSCII PIPëCḡPsP±PSPëPeP° C,P° P°PrCḡPµCÍP° PjC-CÍC†CII PïCḡPsPIP°PrP¶PµPSPSCII PN̄PsPiPs PrC-CIIP»CḤPSPsCÍC,C-.**

PJPeCḡP°C—PSP°, 93400, P>CÍPïP°PSCÍCḤPeP° PsP±P»., Pj. PŷC”PIC”CḡPsPrPsPSPµC†CḤPe, PICÍP». PµCḡPsPjPëCÍP»PsPIP°, P±CÍPr. 24-PI



**PrP»CЦ PjPμPrPëC‡PSPsPiPs P·P°CГC,PsCГCГPIP°PSPSCЦ P»C-PeP°CГCГCҺPePsPiPs  
P·P°CГPsP±CГ**

**РљР·РћР'РћРЎРљ**

**(CLOVASK)**

**РЎРёР»Р°Р'Р:**

*PrC-CГC‡C- CГPμC‡PsPIPëPSPë: PePëCГP»PsC,P° P°C‡PμC,PëP»CГP°P»C-C‡PëP»PsPIP°,  
PeP»PsPïC-PrPsPiCГPμP»CҺ (acetylsalicylic acid, clopidogrel);*

1 PeP°PïCГCГP»P° PjC-CГC,PëC,CҺ PePëCГP»PsC,Pë P°C‡PμC,PëP»CГP°P»C-C‡PëP»PsPIPsC— 75  
PjPi C,P° PeP»PsPïC-PrPsPiCГPμP»CҺ (CГ PIPëPiP»CЦPrC- PeP»PsPïC-PrPsPiCГPμP»CҺ  
PiC-PrCГPsCГCГP»CҺC,,P°C,CГ) 75 PjPi;

*PrPsPiPsPjiP¶PSi CГPμC‡PsPIPëPSPë:*

*PrP»CЦ C,P°P±P»PμC,PsPe PePëCГP»PsC,Pë P°C‡PμC,PëP»CГP°P»C-C‡PëP»PsPIPsC—:  
C‡PμP»CҺP»PsP·P° PjC-PeCГPsPeCГPëCГC,P°P»C-C‡PSP°, PSP°C,CГC-CГ  
PeCГPsCГPeP°CГPjPμP»PsP·P°, C,P°P»CҺPe, PiC-PïCГPsPjPμP»PsP·P°, C,PëC,P°PSCГ  
PrC-PsPeCГPëPr (P• 171), PeCГPμPjPSC-CГ PrC-PsPeCГPëPr PePsP»PsC—PrPSPëPNë  
P±PμP·PIPsPrPSPëPNë, PïPsP»C-PμC,PëP»PμPSPiP»C-PePsP»CҺ 6000 (PjP°PeCГPsPiPsP» 6000),  
PePëCГP»PsC,P° P»PëPjPsPSPSP° P±PμP·PIPsPrPSP°;*

*PrP»CЦ C,P°P±P»PμC,PsPe PeP»PsPïC-PrPsPiCГPμP»CҺ: C‡PμP»CҺP»PsP·P°  
PjC-PeCГPsPeCГPëCГC,P°P»C-C‡PSP°, PSP°C,CГC-CГ PeCГPsCГPeP°CГPjPμP»PsP·P°,  
PiC-PïCГPsPjPμP»PsP·P°, PiC-PrCГPsPeCГPëPïCГPsPïC-P»C‡PμP»CҺP»PsP·P°, C,P°P»CҺPe,  
C,PëC,P°PSCГ PrC-PsPeCГPëPr (P• 171), PïPsP»C-PμC,PëP»PμPSPiP»C-PePsP»CҺ 6000  
(PjP°PeCГPsPiPsP» 6000), PeCГPμPjPSC-CГ PrC-PsPeCГPëPr PePsP»PsC—PrPSPëPNë  
P±PμP·PIPsPrPSPëPNë, P·P°P»C-P·P° PsPeCГPëPr (P• 172), PsP»C-CЦ CГPëC‡PëPSPsPIP°  
PiC-PrCГPsPiPμPSC-P·PsPIP°PSP°;*

*PeP°PïCГCзP»P° (PePsCГPiCзCГ C,P° PeCГPëC€PμC‡PeP°): P¶PμP»P°C,PëPS, PIPsPrP°,  
C,PëC,P°PSCГ PrC-PsPeCГPëPr (P• 171).*

**P»C-PeP°CГCГCҺPeP° C,,PsCГPjP°. РљР°Р°PïCГCГP»Pë C,PIPμCГPrC-.**

*PћCГPSPsPIPsC- C,,C-P·PëPePs-C...C-PjC-C‡PSC- PIP»P°CГC,PëPIPsCГC,C-:  
PSPμPïCГPsP·PsCГC-, C,PIPμCГPrC- P¶PμP»P°C,PëPSPsPIC- PeP°PïCГCГP»Pë P±C-P»PsPiPs  
P°P±Ps PjP°PNëP¶Pμ P±C-P»PsPiPs PePsP»CҺPsCГCГ, CЦPeC- PjC-CГC,CЦC,CҺ PsPrPSCГ  
C,P°P±P»PμC,PeCГ P°C‡PμC,PëP»CГP°P»C-C‡PëP»PsPIPsC— PePëCГP»PsC,Pë, PIPeCГPëC,CГ  
PïP»C-PIPePsPIPsCҺ PsP±PsP»PsPSPePsCҺ, P±C-P»PsPiPs P°P±Ps PjP°PNëP¶Pμ P±C-P»PsPiPs  
PePsP»CҺPsCГCГ C,P° PrPIC- C,P°P±P»PμC,PePë PeP»PsPïC-PrPsPiCГPμP»CҺ, PIPeCГPëC,C-  
PïP»C-PIPePsPIPsCҺ PsP±PsP»PsPSPePsCҺ, P¶PsPIC,Ps-PePsCГPëC‡PSPμPIPsPiPs  
PePsP»CҺPsCГCГ.*

**P<sub>α</sub>P°C<sub>β</sub>P<sub>j</sub>P°P<sub>ε</sub>P<sub>s</sub>C, P<sub>μ</sub>C<sub>β</sub>P°P<sub>i</sub>P<sub>μ</sub>P<sub>i</sub>C, P<sub>ε</sub>C<sub>β</sub>P<sub>s</sub>P°P<sub>i</sub>C<sub>β</sub>C<sub>r</sub>P<sub>i</sub>P°.**

P<sub>h</sub>PSC, P<sub>e</sub>C, C<sub>h</sub>PsPjP $\pm$ PsC, P<sub>e</sub>C $\pm$ PSC- P $\cdot$ P<sup>o</sup>C $\Gamma$ PsP $\pm$ P<sub>e</sub>. P $\dagger$ PSPiC-P $\pm$ C-C, PsC<sub>h</sub>P<sub>e</sub>  
P<sup>o</sup>PiC<sub>h</sub>P<sub>u</sub>PiP<sup>o</sup>C $\dagger$ C-C— C, C<sub>h</sub>PsPjP $\pm$ PsC $\dagger$ P<sub>e</sub>C, C-PI, P $\cdot$ P<sup>o</sup> PIP<sub>e</sub>PSC $\dagger$ IC, PePsPj  
PiP<sub>u</sub>PiP<sup>o</sup>C<sub>h</sub>P<sub>e</sub>PSC $\Gamma$ . P<sub>h</sub>PsPjP $\pm$ C-PSP<sup>o</sup>C $\dagger$ C-C—. P<sub>h</sub>PsP $\Gamma$  P<sub>h</sub>P $\ddot{y}$ P $\Gamma$  B01A C30.

***P<sub>α</sub>P<sup>o</sup>C<sub>7</sub>PjP<sup>o</sup>PePsP»PsPiiC<sub>7</sub>PSi PIP»P<sup>o</sup>C<sub>7</sub>C,PëPIPsC<sub>7</sub>C,C-***

$$P\propto P^{\circ}C\overline{H}P_jP^{\circ}P_{\epsilon}P_sP_{\tau}P_{\ddot{e}}PSP^{\circ}P_jC-P_{\epsilon}P^{\circ}.$$

P<sub>Hb</sub>P<sub>μ</sub>C...P<sup>o</sup>PSC-P·P<sub>j</sub> P<sub>Γ</sub>C-C—

[illegible]

PhCl<sup>+</sup>PeC-P»CH<sub>2</sub>PePë P°PeC,PëPIPSPëPNë PjPμC,P°P±PsP»C-C, CrC,PIPsC<sub>7</sub>C<sub>7</sub>C" C,CH<sub>2</sub>Cl<sup>+</sup>Cl<sub>2</sub> P·P°  
PrPsPiPsPjPsPiPsC<sub>7</sub> C,,PμC<sub>7</sub>PjPμPSC,C-PI Cl<sup>+</sup>PeCl<sup>+</sup>C,PμPjPë C†PëC,PsC...C<sub>7</sub>PsPjCr CYP450, P°  
PrPμCl<sub>2</sub>PeC- P· PSPëC... C" PiPsP»C-PjPsC<sub>7</sub>C,,PSPëPjPë P°P±Ps PiC<sub>7</sub>PëPiPSC-C†CrC<sub>7</sub>C,CH<sub>2</sub>Cl<sup>+</sup>Cl<sub>2</sub>  
C-PSCëPëPjPë P»C-PeP°C<sub>7</sub>Cl<sup>+</sup>CH<sub>2</sub>PePëPjPë P·P°Cl<sup>+</sup>PsP±P°PjPë, PSPμ Cr PIC<sup>+</sup>C-C...  
PiP°C†C-C" PSC,C-PI PIC-PrP±CrPIP°C" C,CH<sub>2</sub>Cl<sup>+</sup>Cl<sub>2</sub> PIC-PrPiPsPIC-PrPSPμ  
PiC<sub>7</sub>PëPiPSC-C†PμPSPSC<sub>2</sub> C,C<sub>7</sub>PsPjP±PsC†PëC,C-PI.

$P\propto P^{\circ}C\overline{H}PjP^{\circ}PePsPrP\ddot{e}PSP^{\circ}PjC-C\ddagger PSC-P_{\mu}C,,P_{\mu}PeC,P\ddot{e}$

РиРсPIC,PsC<sub>7</sub>PSPu P·P°C<sub>7</sub>C,PsC<sub>7</sub>C<sub>7</sub>PIP°PSPSC<sub>7</sub> PeP»PsPiC-PrPsPiC<sub>7</sub>PuP»C<sub>7</sub> C<sub>7</sub> PrPsP·C- 75 PiPi

PSP° PrPsP±Cf P·PSP°C±PSPsCf PjC-CfPscf PíCfPëPiPSC-C±CfPIP°P»PsB B B B B B B B B  
PñP"Pa-C-PSPPrCfPePsPIP°PSCf P°PiCfPµPiP°C†C-Cf C,CfPspjP±PsC†PëC,C-PI P·  
PiPµCfCëPsPiPs PrPSCf P·P°CfC,PsCfCfPIP°PSPSCf; C,P°PePëPñ PµC,,PµPeC,  
PiPsCfC,CfPiPsPiPs P·P±C-P»CfCëCfPIP°PICfCf C- PIPëC...PsPrPëPI PSP°  
PiPsCfC,C-PñPSPëPñ CfC-PIPµPSCf P· PrPsCfCfPiPSPµPSPSCfPj  
CfC-PIPSPsPIP°P¶PSPsPiPs CfC,P°PSCf PSP° 3Bf "7-Pñ PrPµPSCf. Pj  
CfC-PIPSPsPIP°P¶PSPsPjCf CfC,P°PSC- CfPµCfPµPrPSC-Pñ CfC-PIPµPSCf  
PiCfPëPiPSC-C±PµPSPSCf C,CfPspjP±PsC†PëC,C-PI, C%Ps CfPiPsCfC,PµCfC-PiP°PICfCf  
PSP° C,P»C- PrPsP·Pë 75 PjPi PSP° PrPsP±Cf, CfC,P°PSPsPIPëPI PIC-Pr 40 PrPs 60 %.  
PñPiCfPµPiP°C†C-Cf C,CfPspjP±PsC†PëC,C-PI C,P° C†P°Cf PeCfPspisC,PµC±C-  
PiPsCfC,CfPiPsPiPs PiPsPiPµCfC,P°P»PëCfCf PrPs PIPëC...C-PrPSPsPiPs CfC-PIPSCf  
P·P°PiP°P»PsPj PiCfPsc,CfPiPsPj 5 PrPSC-PI.

PñC†PµC,PëP»CfP°P»C-C†PëP»PsPIP° PePëCfP»PsC,P° PiCfPëPiPSC-C±CfC"  
P°PiCfPµPiP°C†C-Cf C,CfPspjP±PsC†PëC,C-PI CëP»CfC...PsPj PSPµPsP±PsCfPsc,PSPsPiPs  
PiCfPëPiPSC-C±PµPSPSCf PiCfPscCfC,P°PiP»P°PSPPrPëPSC-PI  
C†PëPeP»PsPsPeCfPëPiPµPSP°P·Pë C-, C,P°PePëPj C†PëPSPsPj, PiCfPëPiPSC-C±CfC"  
CfC,PIPsCfPµPSPSCf C,CfPspjP±PsPeCfP°PSCf Pñ, CfPePëPñ PIPëPeP»PëPeP°C"  
P°PiCfPµPiP°C†C-Cf C,CfPspjP±PsC†PëC,C-PI C,P° PIP°P·PsPePsPSCfC,CfPëPeC†C-Cf. PjPµPñ  
PµC,,PµPeC, C,CfPëPiP°C" PiCfPsc,CfPiPsPj CfCfCfPspis P¶PëC,C,Cf  
C,CfPspjP±PsC†PëC,C-PI.

*PaP°CfPjP°PePsPeC-PSPµC,PëPeP°.*

PñC†PµC,PëP»CfP°P»C-C†PëP»PsPIP° PePëCfP»PsC,P°

PñP±CfPscfP±C†C-Cf

PñC†PµC,PëP»CfP°P»C-C†PëP»PsPIP° PePëCfP»PsC,P° PiC-CfP»Cf P°P±CfPscfP±C†C-C—  
CëP»CfC...PsPj PiC-PrCfPsp»C-P·Cf PiPµCfPµC,PIPsCfCfC"C,CfCfCfCf PSP°  
CfP°P»C-C†PëP»PsPICf PePëCfP»PsC,Cf. PµC-PePsPIPëPñ CfC-PIPµPSCf  
CfP°P»C-C†PëP»PsPIPsC— PePëCfP»PsC,Pë Cf PiP»P°P·PjC- PeCfPspisC-  
PrPsCfCfPiP°C"C,CfCfCfCf PiCfPsc,CfPiPsPj 1 PiPsPrPëPSPë PiC-CfP»Cf  
P·P°CfC,PsCfCfPIP°PSPSCf. PñP°PePëPj C†PëPSPsPj, CfC-PIPµPSCf  
P°C†PµC,PëP»CfP°P»C-C†PëP»PsPIPsC— PePëCfP»PsC,Pë PI PiP»P°P·PjC- PeCfPspisC-  
P·PSP°C...PsPrPëC,CfCfCfCf PiPsP·P° PjPµP¶PµCf PIPëP·PSP°C±PµPSPSCf C±PµCfPµP· 1,5Bf "3  
PiPsPrPëPSPë PiC-CfP»Cf P·P°CfC,PsCfCfPIP°PSPSCf P»C-PeP°CfCfCfPspis  
P·P°CfPsp±Cf.

P PsP·PiPsPrC-P»

PñC†PµC,PëP»CfP°P»C-C†PëP»PsPIP° PePëCfP»PsC,P° PiPsPiP°PSPs  
P·PiBf™ CfP·CfC"C,CfCfCfCf P· P±C-P»PeP°PjPë PiP»P°P·PjPë PeCfPspisC-, PIPsPSP° PjP°C"  
PSPëP·CfPePëPñ CfC-PIPµPSCf CfPsp·PiPsPrC-P»Cf (10 P»). P±C— PjPµC,P°P±PsP»C-C,,  
CfP°P»C-C†PëP»PsPIP° PePëCfP»PsC,P°, CëPIPëPrPePs P·PiBf™ CfP·CfC"C,CfCfCfCf P·  
P±C-P»PeP°PjPë PiP»P°P·PjPë PeCfPspisC-, P°P»Pµ P·PiBf™ CfP·CfPIP°PSPSCf  
P·P°P»PµP¶PëC,Cf PIC-Pr PePsPSC†PµPSC,CfP°C†C-C— (PSPµP»C-PSC-PñPSPµ). PµCfPë  
PSPëP·CfPePëC... PePsPSC†PµPSC,CfP°C†C-CfC... (< 100 PjPePi/PjP») PiCfPëP±P»PëP·PSPs 90  
% CfP°P»C-C†PëP»PsPIPsC— PePëCfP»PsC,Pë P·PiBf™ CfP·CfC"C,CfCfCfCf P·  
P°P»CfP±CfPjC-PSPsPj. PñP°P»C-C†PëP»PsPIP° PePëCfP»PsC,P° P»PµPiPePs  
PiCfPspSPëPeP°C" PI CfCfC- C,PeP°PSPëPSPë C,P° CfC-PrPëPSPë PsCfPiP°PSC-P·PjCf, Cf  
C,PsPjCf C†PëCfP»C- C†PµPSC,CfP°P»CfPSCf PSPµCfPIPsPICf CfPëCfC,PµPjCf,

PiCḡCfPrPSPμ PjPsP»PsPePs C,P° C,PeP°PSPëPSPë PīP»PsPrP°.

PḡPμC,P°P±PsP»C-P·Pj C,P° PIPëPIPμPrPμPSPSCḡ

PḡC†PμC,PëP»CḡP°P»C-C†PëP»PsPIP° PePëCḡP»PsC,P° CëPIPëPrPePs  
PīPμCḡPμC,PIPsCḡCḡC”C,CHCḡCḡ CëP»CḡC...PsPj PiC-PrCḡPsP»C-P·Cḡ Cḡ  
CḡP°P»C-C†PëP»PsPICḡ PePëCḡP»PsC,Cḡ, PīPμCḡC-PsPr PSP°PīC-PIPIPëPIPμPrPμPSPSCḡ  
CḡPePsC— PīCḡPë PrPsP·P°C... P°C†PμC,PëP»CḡP°P»C-C†PëP»PsPIPsC— PePëCḡP»PsC,Pë  
75Бḡ“100 PjPi CḡC,P°PSPsPIPëC,CH 0,3Бḡ“0,4 PiPsPrPëPSPë. PŸP°P»C-C†PëP»PsPIP°  
PePëCḡP»PsC,P° P·PrPμP±C-P»CHCëPsPiPs PePsPSБḡ™ CḡPiCḡC” PI PīPμC†C-PSC†C-, PrPμ  
CḡC,PIPsCḡCḡC”C,CHCḡCḡ CḡP°P»C-C†PëP»CḡCḡPëPSPsPIP° PePëCḡP»PsC,P°,  
C,,PμPSPsP»PsPIPëPḡ PīP»CHPeCḡCḡPsPSC-Pr, P°C†PëP»PsPIPëPḡ PīP»CHPeCḡCḡPsPSC-Pr C,P°  
CḡCḡPr PIC,PsCḡPëPSPSPëC... PjPμC,P°P±PsP»C-C,C-PI. PḡPμCḡC-PsPr PīP»P°P·PjPsPIPsPiPs  
PSP°PīC-PIPIPëPIPμPrPμPSPSCḡ CḡP°P»C-C†PëP»PsPIPsC— PePëCḡP»PsC,Pë Cḡ CḡPeP»P°PrC-  
P»C-PeP°CḡCḡCHPePsPiPs P·P°CḡPsP±Cḡ PḡP·PḡP·PḡPŸPḡ CḡC,P°PSPsPIPëC,CH  
PīCḡPëP±P»PëP·PSPs 2 PiPsPrPëPSPë. PḡPμC,P°P±PsP»C-P·Pj CḡP°P»C-C†PëP»P°C,C-PI  
C” PSP°CḡPëC†PμPSPëPj, P·P°PīP°P»CHPSPëPḡ PeP»C-CḡPμPSCḡ PsCḡPiP°PSC-P·PjCḡ  
P·PSPëPḡCḡC”C,CHCḡCḡ Cḡ CḡP°P·C- PIPëCḡPsPePëC... CḡPëCḡPsPIP°C,PePsPIPëC...  
PePsPSC†PμPSC,CḡP°C†C-Pḡ C†PμCḡPμP· PsP±PjPμPḡPμPSCḡ P·PrP°C,PSC-CḡC,CH  
PīPμC†C-PSPePë CḡC,PIPsCḡCḡPIP°C,Pë CḡPe CḡP°P»C-C†PëP»CḡCḡPëPSPsPICḡ  
PePëCḡP»PsC,Cḡ, C,P°Pe C- C,,PμPSPsP»PsPIPëPḡ PīP»CHPeCḡCḡPsPSC-Pr. Pj CḡP°P·C-  
P·P°CḡC,PsCḡCḡPIP°PSPSCḡ C,PsPeCḡPëC†PSPëC... PrPsP· (10Бḡ“20 Pi) PīPμCḡC-PsPr  
PSP°PīC-PIPIPëPIPμPrPμPSPSCḡ P· PīP»P°P·PjPë PeCḡPsPIC- PjPsPḡPμ  
PīPμCḡPμPIPëC%ḡCḡPIP°C,Pë 20 PiPsPrPëPS. Pj CḡP°P·C- P·P°CḡC,PsCḡCḡPIP°PSPSCḡ  
PIPëCḡPsPePëC... PrPsP· P°C†PμC,PëP»CḡP°P»C-C†PëP»PsPIPsC— PePëCḡP»PsC,Pë  
PIPëPIPμPrPμPSPSCḡ CḡP°P»C-C†PëP»PsPIPsC— PePëCḡP»PsC,Pë  
PīC-PrPīPsCḡCḡPrPePsPICḡC”C,CHCḡCḡ PeC-PSPμC,PëC†C- PSCḡP»CHPsPIPsPiPs  
PīPsCḡCḡPrPeCḡ (C,PsP±C,Ps CëPIPëPrPeC-CḡC,CH PIPëPIPμPrPμPSPSCḡ C”  
PīPsCḡC,C-PḡPSPsCḡ PIC-PrPSPsCḡPSPs PePsPSC†PμPSC,CḡP°C†C-C— Cḡ PīP»P°P·PjC-  
PeCḡPsPIC-), PīCḡPë C†CHPsPjCḡ C,,P°PeC,PëC†PSPëPḡ PīPμCḡC-PsPr  
PSP°PīC-PIPIPëPIPμPrPμPSPSCḡ CḡC,P°PSPsPIPëC,CH 6 PiPsPrPëPS C-  
P±C-P»CHCëPμ. PḡPëCḡPePsPIP° PμPeCḡPeCḡPμC†C-Cḡ PSPμP·PjC-PSPμPSPsC—  
P°PeC,PëPIPSPsC— CḡPμC†PsPIPëPSPë P·P°P»PμPḡPëC,CH PIC-Pr CḡPḡ CḡPμC†C-.  
PḡCḡPeC-P»CHPePë P·PSP°C†PμPSPSCḡ CḡPḡ CḡPμC†C- PīPμCḡPμPIPëC%ḡCḡC” 6,5,  
PSPëCḡPePsPIPëPḡ PeP»C-CḡPμPSCḡ PIC-P»CHPSPsPiPs CḡP°P»C-C†PëP»P°C,Cḡ  
P·P±C-P»CHCëCḡC”C,CHCḡCḡ P· 5 PrPs 80 %. PḡC-CḡP»Cḡ  
P·P°CḡC,PsCḡCḡPIP°PSPSCḡ C,PμCḡP°PīPμPIC,PëC†PSPëC... PrPsP·  
PīCḡPëP±P»PëP·PSPs 10 % CḡPīPsCḡC,PμCḡC-PiP°C”C,CHCḡCḡ PI CḡPμC†C- Cḡ  
C,,PsCḡPjC- CḡP°P»C-C†PëP»PsPIPsC— PePëCḡP»PsC,Pë, 75 % Cḡ C,,PsCḡPjC-  
CḡP°P»C-C†PëP»CḡCḡPëPSPsPIPsC— PePëCḡP»PsC,Pë, 10 % Cḡ C,,PsCḡPjC-  
C,,PμPSPsP»PsPIPsPiPs C,P° 5 % Cḡ C,,PsCḡPjC- P°C†PëP»PsPIPsPiPs  
PīP»CHPeCḡCḡPsPSC-PrCḡ CḡP°P»C-C†PëP»PsPIPsC— PePëCḡP»PsC,Pë.

P— PsPiP»CḡPrCḡ PSP° C,,P°CḡPjP°PePsPeC-PSPμC,PëC†PSC- C,P° PjPμC,P°P±PsP»C-C†PSC-  
C...P°CḡP°PeC,PμCḡPëCḡC,PëPePë PsP±PsC... CḡPīPsP»CḡPe PIPëPSPëPePSPμPSPSCḡ  
PeP»C-PSC-C†PSPs P·PSP°C†PjPsC— C,,P°CḡPjP°PePsPeC-PSPμC,PëC†PSPsC—  
PIP·P°C”PjPsPrC-C— PjP°P»PsPḡPjPsPIC-CḡPSPμ.

PḡP»PsPīC-PrPsPiCḡPμP»CH



## P'Cl'PjPsPeC,CzPIP°PSPSClI

PμC-Cl'P»ClI PsPrPSPsCtjP°P·PsPIPsPiPs C,P° PiPsPIC,PsCtjPSPsPiPs  
PiPμCtjPsCtjP°P»CHbPSPsPiPs P·P°Cl'C,PsCl'Cl'PIP°PSPSClI PrPsP·Pë 75 PjPi PSP° PrPsP±Cr  
PeP»PsPiC-PrPsPiCtjPμP»CH C€PIPePrPePs P°P±Cl'PsCtjP±CrC''C,CHbCl'ClI. PÿPμCtjPμPrPSClI  
PiC-PePsPIP° PePsPSCtPμPSC,CtjP°CtC-ClI PeP»PsPiC-PrPsPiCtjPμP»CH PI  
PSPμP·PjC-PSPμPSC-PNë C,,PsCtjPjC- Cr PiP»P°P·PjC- PeCtjPsPIC- (PiCtjPëP±P»PëP·PSPs  
2,2bTj"2,5 PSPI/PjP» PiC-Cl'P»ClI PsPrPSPsCtjP°P·PsPIPsPiPs PiPμCtjPsCtjP°P»CHbPSPsPiPs  
P·P°Cl'C,PsCl'Cl'PIP°PSPSClI PrPsP·Pë 75 PjPi) PrPsCl'ClI PiP°C''C,CHbCl'ClI PiCtjPëP±P»PëP·PSPs  
CtPμCtjPμP· 45 C...PIPeP»PëPS PiC-Cl'P»ClI P·P°Cl'C,PsCl'Cl'PIP°PSPSClI.  
PhP±Cl'PsCtjP±CtC-ClI Cl'C,P°PSPsPIPeC,CHb PSPμ PjPμPSC€Pμ 50 % P·PiC-PrPSPs P·  
PeC-P»CHbPeC-Cl'C,CHb PjPμC,P°P±PsP»C-C,C-PI PeP»PsPiC-PrPsPiCtjPμP»CH, C%oPs  
PIPePrC-P»ClI CHb,CHbCl'ClI C-P· Cl'PμCtPμCH.

## P PsP·PiPsPrC-P»

*In vitro* PeP»PsPiC-PrPsPiCtjPμP»CH C,P° PsCl'PSPsPIPSpëPNë CtPëCtjPeCrP»CHbCHbCtPëPNë  
(PSPμP°PeC,PëPIPSpëPNë) PjPμC,P°P±PsP»C-C, PsP±PsCtjPsC,PSPs  
P·PiBtj™ ClI P·CrCtjC,CHbCl'ClI P· PiCtjPsC,PμC—PSP°PjPë PiP»P°P·PjPë PeCtjPsPIC-  
P»CHbPrPëPSPë (98 % C,P° 94 % PIC-PrPiPsPIC-PrPSPs). P—PiBtj™ ClI P·PsPe C''  
PSPμPSP°Cl'PëCtPμPSP°PSPëPj C-*n vitro* PI C€PëCtjPsPePsPjCr PrC-P°PiP°P·PsPSC-  
PePsPSCtPμPSC,CtjP°CtC-PNë.

## PμPμC,P°P±PsP»C-P·Pj

PμP»PsPiC-PrPsPiCtjPμP»CHb P°PeC,PëPIPSPs PjPμC,P°P±PsP»C-P·CrC''C,CHbCl'ClI PI  
PiPμCtC-PSCtC-. *In vitro* C,P° *in vivo* PjPμC,P°P±PsP»C-P·Pj PeP»PsPiC-PrPsPiCtjPμP»CHb  
PIC-PrP±CrPIP°C''C,CHbCl'ClI PrPIPsPjP° PsCl'PSPsPIPSpëPjPë PjPμC,P°P±PsP»C-CtPSPëPjPë  
C€P»ClI C...P°PjPë: PiPμCtjC€PëPNë bTj" P·P° PrPsPiPsPjPsPiPsCtj PμCl'C,PμCtjP°P·Pë P·  
PiPsPrP°P»CHbC€PëPj PiC-PrCtjPsP»C-P·PsPj Cr PSPμP°PeC,PëPIPSpëPNë PjPμC,P°P±PsP»C-C,,  
ClI PePëPNë C'' PiPsC...C-PrPSPëPj PeP°CtjP±PsPeCl'PëP»CHbPSPsC— PePëCl'P»PsC,Pë (85 %  
CtPëCtjPeCrP»CHbCHbCtPëC... PjPμC,P°P±PsP»C-C,C-PI), PrCtjCrPiPëPNë bTj" P·P°  
PrPsPiPsPjPsPiPsCtj CtjC-P·PSPëC... CtPëC,PsC...CtjPsPjC-PI P 450. PÿPiPsCtP°C,PeCr Cr  
C...PsPrC- PjPμC,P°P±PsP»C-P·PjCr PeP»PsPiC-PrPsPiCtjPμP»CHb CrC,PIPsCtjCtjC''C,CHbCl'ClI  
PiCtjPsPjC-P¶PSPëPNë PjPμC,P°P±PsP»C-C, 2-PsPeCl'Ps-PeP»PsPiC-PrPsPiCtjPμP»CHb. P'  
CtjPμP·CrP»CHbC,P°C,C- PiPsPrP°P»CHbC€PsPiPs PjPμC,P°P±PsP»C-P·PjCr PiCtjPsPjC-P¶PSPsPiPs  
PjPμC,P°P±PsP»C-C,Cr 2-PsPeCl'Ps-PeP»PsPiC-PrPsPiCtjPμP»CHb C,,PsCtjPjCrC''C,CHbCl'ClI  
P°PeC,PëPIPSpëPNë PjPμC,P°P±PsP»C-C,, C,C-PsP»CHbPSP° PiPsC...C-PrPSP°  
PeP»PsPiC-PrPsPiCtjPμP»CHb. *In vitro* CtPμPNë PjPμC,P°P±PsP»C-CtPSPëPNë C€P»ClI C...  
PiCtjPsC...PsPrP¶PμPSPSClI PsPiPsCl'PμCtjPμPrPePsPIP°PSPëPNë C-P·PsC,,PμCtjPjPμPSC,P°PjPë  
CYP3P4, CYP2Pÿ19, CYP1P42 C,P° CYP2P'6. PhPeC,PëPIPSpëPNë C,C-PsP»CHbPSPëPNë  
PjPμC,P°P±PsP»C-C,, ClI PePëPNë P±CrP»Ps PIPëPrC-P»PμPSPs *in vitro*, C€PIPePrPePs C,P°  
PSPμPsP±PsCtjPsC,PSPs P·PiBtj™ ClI P·CrC''C,CHbCl'ClI P· C,CtjPsPjP±PsCtPëC,P°CtjPSPëPjPë  
CtjPμCtPμPiC,PsCtjP°PjPë, PiPsPrP°PIP»ClI CHbCtPë C,P°PePëPj CtPëPSPsPj P°PiCtjPμPiP°CtC-CHb  
C,CtjPsPjP±PsCtPëC,C-PI.

PμC-Cl'P»ClI PsPrPSPsCtjP°P·PsPIPsPiPs P·P°Cl'C,PsCl'Cl'PIP°PSPSClI  
PeP»PsPiC-PrPsPiCtjPμP»CHb Cr PSP°PIP°PSC,P°P¶CrPIP°P»CHbPSC-PNë PrPsP·C- 300 PjPi  
PiPsPeP°P·PSPëPe C<sub>max</sub> P°PeC,PëPIPSpëPNë PjPμC,P°P±PsP»C-C,Cr Cr 2 CtjP°P·Pë PIPëC%oPëPNë,  
PSC-P¶ PiC-Cl'P»ClI P·P°Cl'C,PsCl'Cl'PIP°PSPSClI PiCtjPμPiP°CtjP°C,Cr Cr  
PiC-PrC,CtjPëPjCrCtjCtC-PNë PrPsP·C- 75 PjPi PiCtjPsC,ClI PiPsPj 4 PrPSC-PI. C<sub>max</sub>  
PrPsCl'ClI PiP°C''C,CHbCl'ClI PiCtjPëP±P»PëP·PSPs CtPμCtjPμP· 30bTj"60 C...PIPeP»PëPS

РiC-СiP»Cи Р·Р°СiС,РсСiСiРiР°РSPSCи Р»C-РeР°СiСiСiРeРсРiРс Р·Р°СiСсР±Сi.

Р'РёРiРµРrРµРSPSCи

РµСiРс,СиРiРсРj 120 РiРсРrРёРS РiC-СiP»Cи РiРµСiРсiР°Р»СiРSPсРiРс Р·Р°СiС,РсСiСiРiР°РSPSCи Р»СiРrРёРSPсСi <sup>14</sup>РiС-СiРµРSPсРiРс РeР»РсРiC-РrРсРiСiРµР»Сi РiСiРёР±Р»Р»Р·РSPс 50 % РiРёРrC-Р»CиР»РсСiСiС C-Р·СiРµСiРµСiС C- РiСiРёР±Р»Р»Р·РSPс 46 % вi” Р· РeР°Р»РсРj. РµC-СiP»Cи РсРrРSPсiР°Р·РсРiРс РiРµСiРсiР°Р»СiРSPс Р·Р°СiС,РсСiСiРiР°РSPSCи РrРсР·Рё 75 РjРi РiРµСiС-РсРr РSP°РiC-РiРiРёРiРµРrРµРSPSCи СiС,Р°РSPсРiРёРi РiСiРёР±Р»Р»Р·РSPс 6 РiРсРrРёРS. РµРµСiС-РсРr РSP°РiC-РiРiРёРiРµРrРµРSPSCи РсСiСРSPсРiРSPсРiРс СiРёСiРeСiР»СiСiСiРсРiРс (РSPµР°РeC,РёРiРSPсРiРс) РjРµC,Р°Р±РсР»C-C,СiСiС,Р°РSPсРiРёРi 8 РiРсРrРёРS РiC-СiP»Cи РсРrРSPсiР°Р·РсРiРс Р°Р±Рс РiРсРiC,РсСiРSPсРiРс Р·Р°СiС,РсСiСiРiР°РSPSCи.

Р»Р°Р°РiРjР°РeРсРiРµРSPµC,РёРeР°

РµР»Р»РсРiC-РrРсРiСiРµР»Сi Р°РeC,РёРiCiСiС,Сi РrРµC-Р»СiРeР° РiРсР»C-РjРсСiС,РSPёC... C-Р·Рс,РµСiРjРµРSC,C-Рi CYP450. CYP2Pi19 Р±РµСiРµ СiСiР°СiС,Сi РiСi,РiРсСiРµРSC- CиРe Р°РeC,РёРiРSPсРiРс РjРµC,Р°Р±РсР»C-C,СiС, C,Р°Рe C- РiСiРсРjC-РiРSPсРiРс РjРµC,Р°Р±РсР»C-C,СiС 2-РсРeСiСРс-РeР»РсРiC-РrРсРiСiРµР»Сi. Р—Р°РrР°РSPёРjРё РeC-Р»СiРeC-СiРSPсРiРс РiРёР·РSP°СiРµРSPSCи Р°РiСiРµРiР°СiС-С C,СiРсРjР±РсСiРёC,C-Рi ex vivo C,Р°СiРjРjР°РeРсРeC-РSPµC,РёC±РSC- РiРсРeР°Р·РSPёРeРё C,Р° Р°РSC,РёC,СiРсРjР±РсC,РёC±РSP° РrC-Cи Р°РeC,РёРiРSPсРiРс РjРµC,Р°Р±РсР»C-C,Сi РeР»РсРiC-РrРсРiСiРµР»Сi РiC-РrСiС-Р·РSCиСiС,СiСiСiС РiC-РrРiРсРiC-РrРSPс РrРс РiРµРSPсC,РёРiСiС CYP2Pi19.

CYP2Pi19\*1 Р°Р»РµР» РiC-РrРiРсРiC-РrР°C” РiРсРiРSC-СiС,Сi C,СiРSPeСiС-РсРSP°Р»СiРSPсРjСi РjРµC,Р°Р±РсР»C-Р·РjСiС, C,РсРrC- CиРe Р°Р»РµР»C- CYP2Pi19\*2 C,Р° CYP2Pi19\*3 РiC-РrРiРсРiC-РrР°СiС,Сi Р·РSPёРiРµРSPсРjСi РjРµC,Р°Р±РсР»C-Р·РjСiС. РiР°СiСiР°Р°Р°Р°Р°Р° CYP2Pi19\*2 C,Р° CYP2Pi19\*3 РiC-РrРSPсСiСiC,Сi 85 % Р°Р»РµР» Р·РSPёРiРµРSPсC— C,СiРSPeСiС-C— Сi РiРёC,РµР»C-Рi РµР°РiРeР°Р·Сi C,Р° 99 % вi” РiСiСiРсРrРiРµРSCiC-Рi РiР·C-C—. Р”Рс C-РSCёРёC... Р°Р»РµР» РiРсРiРiРi, РiРсРiРiРi CиР·Р°РSPёC... Р·C- Р·РSPёРiРµРSPёРj РjРµC,Р°Р±РсР»C-Р·РjРсРj, РSP°Р»РµРiР°C,Сi CYP2Pi19\*4, \*5, \*6, \*7 C,Р° \*8, Р°Р»РµРi Р·Р°РiР°Р»СiРSC-Рi РiРсРiСiР»CиCiC— РiРсРSPё Р·СiСiС,СiС-СiР°СiС,СiСiСiС РjРµРSCё СiР°СiС,Рс.

РµР°СiС-C”РSC, Р·C- Р·РSPёРiРµРSPёРj РjРµC,Р°Р±РсР»C-Р·РjРсРj РjР°C” РrРiC- C,СiРSPeСiС-РсРSP°Р»СiРSC- Р°Р»РµР»C-, CиРe РiРёР·РSP°СiРµРSPс РiРёC%Рµ. Р—РiC-РrРSPс Р· РсРiСiР±Р»Р»C-РeРсРiР°РSPёРjРё РrР°РSPёРjРё, РiРµРSPсC,РёРiРё C-Р·РiРсРiC-Р»СiРSPёРj РjРµC,Р°Р±РсР»C-Р·РjРсРj CYP2Pi19 Р·СiСiС,СiС-СiР°СiС,СiСiСiС РiСiРёР±Р»Р»Р·РSPс СiС 2 % РiСiРµРrСiС,Р°РiРSPёРeC-Рi C”РiСiРсРiРµРSC—РrРSPсC— СiР°СiСiС, 4 % вi” РSPµРiСiРсC—РrРSPсC— СiР°СiСiС C- 14 % РeРёC,Р°РiСiСiC-Рi. Р—Р°СiР°Р·C-СiРSCiСiС,Сi C,РµСiС,Рё РrР»Cи РiРёР·РSP°СiРµРSPSCи РiРµРSPсC,РёРiСiС CYP2Pi19 РiР°СiС-C”РSC,Р°.

РiСiРсР±Р»Р»РёРiC- РiСiСiРiРё РiР°СiС-C”РSC,C-Рi

Р·C-РrРсРjРсСiС,C- C%РсРrРс C,Р°СiРjРjР°РeРсРeC-РSPµC,РёC±РSPёC... РiР°СiРjРjРµC,СiС-Рi Р°РeC,РёРiРSPсРiРс РjРµC,Р°Р±РсР»C-C,Сi РeР»РсРiC-РrРсРiСiРµР»Сi Рi СiРёC... РiСiСiРiР°C... РiР°СiС-C”РSC,C-Рi РiC-РrСiСiС,РSC-.

- PiPsCfC, C<sub>7</sub>H<sub>5</sub>PsPiPs PePsC<sub>7</sub>H<sub>5</sub>PsPSP<sup>o</sup>C<sub>7</sub>H<sub>5</sub>PsPiPs CfPëPSP<sup>r</sup>C<sub>7</sub>H<sub>5</sub>PsPjC<sub>r</sub> P±PμP· PiC-PrPN<sub>o</sub>PsPjC<sub>r</sub>



- P†P†P† C, CḡPḡPḡPḡCḡC, Cḡ PIP°PiC-C, PSPsCḡC, C- (PrPḡPI. CḡPsP·PrC-P»  
B«P—P°CḡC, PsCḡCḡPIP°PSPSCḡ Cḡ PḡPḡCḡC-PsPr PIP°PiC-C, PSPsCḡC, C- P°P±Ps  
PiPsPrCḡPIP°PSPSCḡ PiCḡCḡPrPrCḡB»).

**P'P·P°C''PjPsPrC-Cḡ P· C-PSC€PḡPjPḡ P»C-PeP°CḡCḡPḡPḡPḡ P·P°CḡPsP±P°PjPḡ C,P°  
C-PSC€C- PIPḡPrPḡ PIP·P°C''PjPsPrC-PNḡ.**

P>C-PeP°CḡCḡPḡPḡC- P·P°CḡPsP±Pḡ, C%Ps PiPsPIḡḡ™ CḡIP·P°PSC- P· CḡPḡP·PḡPePsPj  
PeCḡPsPIPSC, PḡCḡ

P†CḡPSCḡC'' PiC-PrPIPḡC%PḡPSPḡPNḡ CḡPḡP·PḡPe PeCḡPsPIPSC, PḡCḡC- CḡPḡCḡPḡP·  
PiPsC, PḡPSCḡC-PNḡPSPḡPNḡ P°PrPḡC, PḡPIPSPḡPNḡ CḡPḡPSPḡPḡPiC-P·Pj. PḡP»C-Pr P·  
PsP±PḡCḡPḡPḡPSC-CḡC, Cḡ PiCḡPḡP·PSP°CḡP°C, Pḡ P»C-PeP°CḡCḡPḡPḡC- P·P°CḡPsP±Pḡ,  
PsPrPSPSCḡP°CḡPSPḡ P·P°CḡC, PsCḡCḡPIP°PSPSCḡ CḡPePḡC... PiPsPIḡḡ™ CḡIP·P°PSPs P·  
CḡPḡP·PḡPePsPj PeCḡPsPIPSC, PḡCḡC- (PrPḡPI. CḡPsP·PrC-P» B«PḡCḡPsP±P»PḡPIPSCḡC, C-  
P·P°CḡC, PsCḡCḡPIP°PSPSCḡB»).

PḡPḡCḡPsCḡP°P»CḡPSC- P°PSC, PḡPePsP°PiCḡP»CḡPSC, Pḡ

PḡPḡ CḡPḡPePsPjPḡPSPḡCḡC, CḡCḡCḡ PsPrPSPSCḡP°CḡPSPḡ P·P°CḡC, PsCḡCḡPIP°PSPSCḡ  
P»C-PeP°CḡCḡPḡPḡPḡPḡ P·P°CḡPsP±Cḡ PḡP>PḡP'PḡPḡPḡ P· PiPḡCḡPsCḡP°P»CḡPSPḡPjPḡ  
P°PSC, PḡPePsP°PiCḡP»CḡPSC, P°PjPḡ, PsCḡPeC-P»CḡPḡPḡ CḡPḡ PjPsPḡPḡ PiPsCḡPḡP»PḡC, Pḡ  
C-PSC, PḡPSCḡPḡPIPSC-CḡC, Cḡ PeCḡPsPIPSC, PḡCḡC- (PrPḡPI. CḡPsP·PrC-P»  
B«PḡCḡPsP±P»PḡPIPSCḡC, C- P·P°CḡC, PsCḡCḡPIP°PSPSCḡB»). PḡPsCḡP°  
PiCḡPḡP·PSP°CḡPḡPSPSCḡ PeP»PsPiC-PrPsPiCḡPḡP»Cḡ Cḡ PrPsP·C- 75 PjPi/PrPsP±Cḡ  
Cḡ PiP°CḡC-C''PSC, C-PI, CḡPeC- PsC, CḡPḡPjCḡPIP°P»Pḡ PrPsPiPiPsCḡC, CḡPsPePsPICḡ  
C, PḡCḡP°PiC-Cḡ PIP°CḡC, P°CḡPḡPSPsPj, PSPḡ P·PjC-PSCḡPIP°P»Ps  
C, P°CḡPjP°PePsPeC-PSPḡC, PḡPeCḡ S-PIP°CḡC, P°CḡPḡPSCḡ P°P±Ps  
PjC-PḡPSP°CḡPsPrPSPḡ PSPsCḡPjP°P»C-P·PsPIP°PSPḡ PIC-PrPSPSCḡPḡPSPSCḡ  
(PḡPḡP'), PsPrPSPSCḡP°CḡPSPḡ P·P°CḡC, PsCḡCḡPIP°PSPSCḡ  
PeP»PsPiC-PrPsPiCḡPḡP»Cḡ C- PIP°CḡC, P°CḡPḡPSCḡ P·P±C-P»CḡCḡCḡC'' CḡPḡP·PḡPe  
PIPḡPSPḡPePSPḡPSPSCḡ PeCḡPsPIPSC, PḡCḡ CḡPḡCḡPḡP· PSPḡP·P°P»PḡPḡPSPḡPNḡ  
PIPḡP»PḡPI CḡPḡC... PiCḡPḡPiP°CḡP°C, C-PI PSP° PiPḡPjPsCḡC, P°P·.

P†PSPiC-P±C-C, PsCḡPḡ PiP»C-PePsPiCḡPsC, PḡC—PSPsPIPḡC... CḡPḡCḡPḡPiC, PsCḡC-PI  
P†P†b/P†P†P†P°

P>C-PeP°CḡCḡPḡPḡPḡPḡ P·P°CḡC-P± PḡP>PḡP'PḡPḡPḡ CḡP»C-Pr P·P°CḡC, PsCḡPsPICḡPIP°C, Pḡ  
P· PsP±PḡCḡPḡPḡPSC-CḡC, Cḡ PiP°CḡC-C''PSC, P°Pj, CḡPeC- PsPrPSPSCḡP°CḡPSPs  
PiCḡPḡPNḡPjP°CḡC, Cḡ C-PSPiC-P±C-C, PsCḡPḡ PiP»C-PePsPiCḡPsC, PḡC—PSPsPIPḡC...  
CḡPḡCḡPḡPiC, PsCḡC-PI P†P†b/P†P†P†P° (PrPḡPI. CḡPsP·PrC-P» B«PḡCḡPsP±P»PḡPIPSCḡC, C-  
P·P°CḡC, PsCḡCḡPIP°PSPSCḡB»).

P''PḡPiP°CḡPḡPS

Pj PeP»C-PSC-CḡPSPsPjCḡ PrPsCḡP»C-PrPḡPḡPSPSC-, PiCḡPsPIPḡPrPḡPSPsPjCḡ P·P°  
CḡCḡP°CḡC, Cḡ P·PrPsCḡPsPIPḡC... PrPsP±CḡPsPIPSC»CḡCḡC-PI, PeP»PsPiC-PrPsPiCḡPḡP»Cḡ  
PSPḡ PIPḡPjP°PiP°PI P·PjC-PSPḡ PrPsP·Pḡ PiPḡPiP°CḡPḡPSCḡ C, P° PSPḡ P·PjC-PSCḡPIP°PI  
PIPḡP»PḡPI PiPḡPiP°CḡPḡPSCḡ PSP° PePsP°PiCḡP»CḡCḡC-Cḡ. PḡPrPSPSCḡP°CḡPSPḡ

P·P°CÍC,PsCÍCÍPIP°PSPSCÍ PiPµPİP°CĤPĚPSCÍ PSPµ PIPİP»PĚPIP°C” PSP°  
PİCĤPĚPiPSC-C†CÍPIP°P»CHPSCÍ PrC-CĤ PeP»PsPiC-PrPsPiCĤPµP»CĤ PSP°  
P°PiCĤPµPiP°C†C-CĤ C,CĤPsPjP±PsC†PĚC,C-PI. PhC-P¶ P»C-PeP°CĤCÍCHPePĚPj  
P·P°CÍPSP±PsPj PµP»PhP’PhPŸPµ C,P° PiPµPİP°CĤPĚPSPsPj PjPsP¶P»PĚPIP°  
C,,P°CĤPjP°PePsPrPĚPSP°PjC-C†PSP° PIP·P°C”PjPsPrC-CÍ, C%Ps PjPsP¶Pµ  
PiC-PrPIPĚC%CÍPIP°C,PĚ CĤPĚP·PĚPe CĤPsP·PIPĚC,PeCÍ PeCĤPsPIPsC,PµC†. PhC,P¶Pµ,  
PsPrPSPsC†P°CÍPSPµ P·P°CÍC,PsCÍCÍPIP°PSPSCÍ PIPĚPjP°PiP°C” PsP±PµCĤPµP¶PSPsCÍC,C-  
(PrPĚPI. CĤPsP·PrC-P» B«PhCÍPsP±P»PĚIPsCÍC,C- P·P°CÍC,PsCÍCÍPIP°PSPSCÍB»).

*PŸCĤPsPjP±PsP»C-C,PĚPePĚ*

P’PµP·PiPµPeP° CÍCÍPiCÍC,PSCHPsPiPs P·P°CÍC,PsCÍCÍPIP°PSPSCÍ  
PeP»PsPiC-PrPsPiCĤPµP»CĤ, C,,C-P±CĤPĚPSPsCÍPiPµC†PĚC,,C-C†PSPĚC... P°P±Ps  
C,,C-P±CĤPĚPSPsPSPµCÍPiPµC†PĚC,,C-C†PSPĚC... C,CĤPsPjP±PsP»C-C,PĚC†PSPĚC...  
P·P°CÍPSP±C-PI C,P° PiPµPİP°CĤPĚPSC-PI PIPĚPIC†P°P»P°CÍCH CÍ PiP°C†C-C”PSC,C-PI P·  
PiPsCÍC,CĤPĚPj C-PSC,,P°CĤPeC,PsPj PjC-PsPeP°CĤPrP°. PŞP°CÍC,PsC,P° PeP»C-PSC-C†PSPs  
P·PSP°C†CÍC%PĚC... PeCĤPsPIPsC,PµC† P±CÍP»P° P°PSP°P»PsPiC-C†PSP° C,C-PN₂, C%Ps  
CÍPiPsCÍC,PµCĤC-PiP°P»P°CÍCH CÍ CĤP°P·C- PsPrPSPsC†P°CÍPSPsPiPs  
P·P°CÍC,PsCÍCÍPIP°PSPSCÍ C,CĤPsPjP±PsP»C-C,PĚC†PSPĚC... P·P°CÍPSP±C-PI C-  
PiPµPİP°CĤPĚPSCÍ P· P°C†PµC,PĚP»CÍP°P»C-C†PĚP»PsPIPsCĤ PePĚCÍP»PsC,PsCĤ (PrPĚPI.  
CĤPsP·PrC-P» B«PµPsP±C-C†PSC- CĤPµP°PeC†C-C—B»). P’PµP·PiPµPeP°  
PsPrPSPsC†P°CÍPSPsPiPs P·P°CÍC,PsCÍCÍPIP°PSPSCÍ PePsPjP±C-PSP°C†C-C—  
P°C†PµC,PĚP»CÍP°P»C-C†PĚP»PsPIP° PePĚCÍP»PsC,P°/PeP»PsPiC-PrPsPiCĤPµP»CH C,P°  
C-PSCĚPĚC... C,CĤPsPjP±PsP»C-C,PĚC†PSPĚC... P·P°CÍPSP±C-PI PsC,,C-C†C-PN₂PSPs PSPµ  
PICÍC,P°PSPsPIP»PµPSP°, C,P°PeP° PePsPjP±C-PSP°C†C-CÍ PiPsC,CĤPµP±CÍC”  
PsP±PµCĤPµP¶PSPsCÍC,C- (PrPĚPI. CĤPsP·PrC-P» B«PµPsP±C-C†PSC- CĤPµP°PeC†C-C—B»).

*PkPµP—P—*

PµC-Pr C†P°CÍ PeP»C-PSC-C†PSPsPiPs PrPsCÍP»C-PrP¶PµPSPSCÍ, C%Ps  
PİCĤPsPIPsPrPĚP»PsCÍCÍ P·P° CÍC†P°CÍC,CĤ P·PrPsCĤPsPIPĚC... PrPsP±CĤPsPIPsP»CHC†C-PI,  
PsPrPSPsC†P°CÍPSPµ P·P°CÍC,PsCÍCÍPIP°PSPSCÍ PeP»PsPiC-PrPsPiCĤPµP»CĤ C,P°  
PSP°PİCĤPsPeCÍPµPSCÍ P·P±C-P»CHCĚCÍPIP°P»Ps PİCĤPĚC...PsPIP°PSC- PIC,CĤP°C,PĚ  
PeCĤPsPIC- C†PµCĤPµP· CĚP»CÍPSPePsPIPs-PePĚCĚPePsPIPĚPN₂ C,CĤP°PeC, (PĚPµPŸ).  
PhC,P¶Pµ, PsPrPSPsC†P°CÍPSPµ P·P°CÍC,PsCÍCÍPIP°PSPSCÍ P· PkPµP—P—, CÍ C,PsPjCÍ  
C†PĚCÍP»C- P· C-PSPiC-P±C-C,PsCĤP°PjPĚ PİPhP”-2, PSPµ CĤPµPePsPjPµPSPrCÍC”C,CHCÍCÍ  
(PrPĚPI. CĤPsP·PrC-P» B«PhCÍPsP±P»PĚIPsCÍC,C- P·P°CÍC,PsCÍCÍPIP°PSPSCÍB»). PµCĤPĚ  
PsPrPSPsC†P°CÍPSPsPjCÍ P·P°CÍC,PsCÍCÍPIP°PSPSC- PIPĚCÍPsPePĚC... PrPsP·  
CÍP°P»C-C†PĚP»P°C,C-PI C-P· PkPµP—P— (C†PµCĤPµP·  
PIP·P°C”PjPsPiPsCÍPĚP»CĤPIP°P»CHPSPĚPN₂ PµC,,PµPeC,) PiC-PrPIPĚC%CÍC”C,CHCÍCÍ  
CĤPĚP·PĚPe PIPĚPSPĚPePSPµPSPSCÍ PIPĚCĤP°P·PsPe C- CĚP»CÍPSPePsPIPs-PePĚCĚPePsPIPĚC...  
PeCĤPsPIPsC,PµC†.

P·PeCÍPiPµCĤPĚPjPµPSC,P°P»CHPSC- PrP°PSC- CÍPIC-PrC†P°C,CH, C%Ps  
C-P±CÍPiCĤPsC,,PµPS PjPsP¶Pµ PİCĤPĚPiPSC-C†CÍPIP°C,PĚ PrC-CĤ PSPĚP·CHPePĚC... PrPsP·  
P°C†PµC,PĚP»CÍP°P»C-C†PĚP»PsPIPsC— PePĚCÍP»PsC,PĚ PSP° P°PiCĤPµPiP°C†C-CĤ  
C,CĤPsPjP±PsC†PĚC,C-PI, PePsP»PĚ PIPsPSPĚ P·P°CÍC,PsCÍPsPICÍCĤC,CHCÍCÍ  
PsPrPSPsC†P°CÍPSPs. P’ PsPrPSPsPjCÍ PrPsCÍP»C-PrP¶PµPSPSC-, PePsP»PĚ CĤP°P·PsPICÍ  
PrPsP·CÍ C-P±CÍPiCĤPsC,,PµPSCÍ 400 PjPi P·P°CÍC,PsCÍPsPICÍPIP°P»PĚ PİCĤPsC,CÍPiPsPj 8  
PiPsPrPĚPS PrPs P°P±Ps PİCĤPsC,CÍPiPsPj 30 C...PIPĚP»PĚPS PİC-CÍP»CÍ  
P·P°CÍC,PsCÍCÍPIP°PSPSCÍ PrPsP·PĚ P°C†PµC,PĚP»CÍP°P»C-C†PĚP»PsPIPsC— PePĚCÍP»PsC,PĚ  
P·C- CĚPIPĚPrPePĚPj PIPĚPIC-P»CHPSPµPSPSCÍPj (81 PjPi), CÍPiPsCÍC,PµCĤC-PiP°P»PsCÍCÍ

P·PSPëP¶PµPSPSC¶ PIPiP»PëPICí P°C†PµC,PëP»CíP°P»C-C†PëP»PsPIPsC— PePëCíP»PsC,Pë  
PSP° CíC,PIPsC¶PµPSPSC¶ C,C¶PsPjP±PsPeCíP°PSCí P°P±Ps P°PiC¶PµPiP°C†C-C¶  
C,C¶PsPjP±PsC†PëC,C-PI. PµC¶PsC,Pµ PsP±PjPµP¶PµPSPSC¶ C†PëC... PrP°PSPëC..., P°  
C,P°PePsP¶ CíC,P°C,PëCíC,PëC±PSP° PSPµPrPsCíC,PsPIC-C¶PSC-CíC,CH C%PsPrPs  
PµPeCíC,C¶P°PiPsP»C¶C†C-C— PrP°PSPëC..., PsC,C¶PëPjP°PSPëC... *ex vivo*, PSP°  
PeP»C-PSC-C±PSC- PIPëPiP°PrPePë CíPIC-PrC†P°C,CH PiC¶Ps C,Pµ, C%Ps PSPµ PjPsP¶PSP°  
P·C¶PsP±PëC,Pë PsPrPSPsP·PSP°C±PSPëC... PIPëCíPSPsPIPeC-PI C%PsPrPs  
C¶PµPiCíP»C¶C¶PSPsPiPs P·P°CíC,PsCíCíPIP°PSPSC¶ C-P±CíPiC¶PsC,,PµPSCí; Cí C¶P°P·C-  
CíPëC,CíP°C,PëPIPsPiPs P·P°CíC,PsCíCíPIP°PSPSC¶ C-P±CíPiC¶PsC,,PµPSCí  
PIPëPSPëPePSPµPSPSC¶ PeP»C-PSC-C±PSPs P·PSP°C±PëPjPsPiPs PµC,,PµPeC,Cí  
PjP°P»PsPNëPjPsPIC-C¶PSPµ.

*PŸPµP»PµPeC,PëPIPsC- C-PSPiC-P±C-C,PsC¶Pë P·PIPsC¶PsC,PSPsPiPs P·P°C...PsPiP»PµPSPSC¶  
CíPµC¶PsC,PsPSC-PSCé (PŸP†P—P—PŸ)*

PŸP†P—P—PŸ PIPiP»PëPIP°CHC,CH PSP° P°PeC,PëPIP°C†C-C¶ C,C¶PsPjP±PsC†PëC,C-PI C,P°  
PiC-PrPIPëC%CrCHC,CH C¶PëP·PëPe PIPëPSPëPePSPµPSPSC¶ PeC¶PsPIPsC,PµC±, C,PsPjCí  
P·P°CíC,PsCíPsPICíPIP°C,Pë PŸP†P—P—PŸ PsPrPSPsC±P°CíPSPs P·  
PeP»PsPiC-PrPsPiC¶PµP»PµPj CíP»C-Pr P· PsP±PµC¶PµP¶PSC-CíC,CH.

*PµPµC,P°PjC-P·PsP»*

PµC¶Pë PsPrPSPsC±P°CíPSPsPjCí P·P°CíC,PsCíCíPIP°PSPSC- P·  
P°C†PµC,PëP»CíP°P»C-C†PëP»PsPIPsC¶ PePëCíP»PsC,PsC¶ PjPµC,P°PjC-P·PsP» PjPsP¶Pµ  
P·PjPµPSCëCíPIP°C,Pë PIPiP»PëPI P°C†PµC,PëP»CíP°P»C-C†PëP»PsPIPsC— PePëCíP»PsC,Pë  
PSP° P°PiC¶PµPiP°C†C-C¶ C,C¶PsPjP±PsC†PëC,C-PI. Pj P·PIB¶™ C¶P·PeCí C-P· C†PëPj C,P°PeCí  
PePsPjP±C-PSP°C†C-C¶ CíP»C-Pr PiC¶PëP·PSP°C±P°C,Pë P· PsP±PµC¶PµP¶PSC-CíC,CH  
PiP°C†C-C"°PSC,P°Pj, C¶PeC- PiC¶PëPNëPjP°CHC,CH PSPëP·CHPeC- PrPsP·Pë  
P°C†PµC,PëP»CíP°P»C-C†PëP»PsPIPsC— PePëCíP»PsC,Pë P· PjPµC,PsC¶  
PrPsCíC¶PiPSPµPSPSC¶ PeP°C¶PrC-PsPiC¶PsC,PµPeC,PëPIPsPiPs PµC,,PµPeC,Cí.

*P†PSCëC- P»C-PeP°C¶CíCHPeC- P·P°CíPsP±Pë, C%Ps P·P°CíC,PsCíPsPICéCHC,CHCíC¶  
C¶P°P·PsPj P· PeP»PsPiC-PrPsPiC¶PµP»PµPj*

P†PSPrCíPeC,PsC¶Pë CYP2PŸ19

P¶CíPeC-P»CHPePë PjPµC,P°P±PsP»C-P·Pj PeP»PsPiC-PrPsPiC¶PµP»CH PI P°PeC,PëPIPsPëPNë  
PjPµC,P°P±PsP»C-C, PIC-PrP±CíPIP°C"°C,CHCíC¶ C±P°CíC,PePsPIPs P·P° PrPsPiPsPjPsPiPsC¶  
CYP2PŸ19, P·P°CíC,PsCíCíPIP°PSPSC¶ P»C-PeP°C¶CíCHPePëC... P·P°CíPsP±C-PI, C¶PeC-  
PiC¶PëPiPSC-C±CíCHC,CH P°PeC,PëPIPsC-CíC,CH C†CHPsPiPs C,,PµC¶PjPµPSC,Cí,  
PIC-C¶PsPiC-PrPSPs, PiC¶PëP·PIPsPrPëC,CH PrPs P·PSPëP¶PµPSPSC¶ C¶C-PIPsC¶  
P°PeC,PëPIPsPiPs PjPµC,P°P±PsP»C-C,Cí PeP»PsPiC-PrPsPiC¶PµP»CH. PµP»C-PSC-C±PSP°  
P·PSP°C±PëPjC-CíC,CH C,P°PePsC— PIP·P°C"°PjPsPrC-C— PSPµ PIPëP·PSP°C±PµPSP°.

P PëC,,P°PjPiC-C†PëPS B¶" PiPsC,CíP¶PSPëPNë C-PSPrCíPeC,PsC¶ CYP2PŸ19, C%Ps  
PiC¶PëP·PIPsPrPëC,CH C¶Pe PrPs PiC-PrPIPëC%PµPSPSC¶ C¶C-PIPsC¶ P°PeC,PëPIPsPiPs  
PjPµC,P°P±PsP»C-C,Cí PeP»PsPiC-PrPsPiC¶PµP»CH, C,P°Pe C- PrPs PiC¶PëPiPSC-C±PµPSPSC¶  
C,C¶PsPjP±PsC†PëC,C-PI, C%Ps, P·PsPeC¶PµPjP°, PjPsP¶Pµ PiPsCíPëP»PëC,Pë C¶PëP·PëPe  
PeC¶PsPIPsC,PµC±C-. PiPe PiPsC,CíP¶PSPëPNë P·P°C...C-Pr, C¶PµPePsPjPµPSPrCíC"°C,CHCíC¶  
CíPSPëPeP°C,Pë CíPiC-P»CHPSPsPiPs P·P°CíC,PsCíCíPIP°PSPSC¶ PiPsC,CíP¶PSPëC...  
C-PSPrCíPeC,PsC¶C-PI CYP2PŸ19 (PrPëPI. C¶PsP·PrC-P» B«P¶CíPsP±P»PëPIPsCíC,C-  
P·P°CíC,PsCíCíPIP°PSPSC¶B»).

## P†PSPiC-P±C-C,PsCḡPë CYP2PŸ19

PhCÍPeC-P»CHPePë PjPµC,P°P±PsP»C-P·Pj PeP»PsPīC-PrPsPiCḡPµP»Cḡ PI P°PeC,PëPIPSPëPNë  
PjPµC,P°P±PsP»C-C, PIC-PrP±CfPIP°C”C,CHCÍCÍ C†P°CÍC,PePsPIPs P·P° PrPsPīPsPjPsPiPsCḡ  
CYP2PŸ19, P·P°CÍC,PsCÍCfPIP°PSPSCÍ P»C-PeP°CḡCÍCHPePëC... P·P°CÍPsP±C-PI, C%Ps  
C-PSPiC-P±CfCḡC,CH P°PeC,PëPIPSC-CÍC,CH C†CHPsPiPs C,,PµCḡPjPµPSC,Cf,  
PIC-CḡPsPiC-PrPSPs, PīCḡPëP·PIPsPrPëC,CH PrPs P·PjPµPSC€PµPSPSCÍ CḡC-PIPSCÍ  
P°PeC,PëPIPSPsPiPs PjPµC,P°P±PsP»C-C,Cf PeP»PsPīC-PrPsPiCḡPµP»Cḡ. PḡP»C-PSC-C†PSP°  
P·PSP°C†PëPjC-CÍC,CH C,P°PePsC— PIP·P°C”PjPsPrC-C— PSPµ PIPëP·PSP°C†PµPSP°. PŸP»C-Pr  
CfPSPëPeP°C,Pë PsPrPSPsC†P°CÍPSPsPiPs P·P°CÍC,PsCÍCfPIP°PSPSCÍ  
P»C-PeP°CḡCÍCHPePëC... P·P°CÍPsP±C-PI, CÍPeC- CÍPëP»CHPSPs P°P±Ps PīPsPjC-CḡPSPs  
PīCḡPëPiPSC-C†CfCḡC,CH P°PeC,PëPIPSC-CÍC,CH CYP2PŸ19 (PrPëPI. CḡPsP·PrC-P»Pë  
B«PαP°CḡPjP°PePsPeC-PSPµC,PëPeP°B» C,P° B«PhCÍPsP±P»PëPIPsCÍC,C-  
P·P°CÍC,PsCÍCfPIP°PSPSCÍB»).

P”Ps P»C-PeP°CḡCÍCHPePëC... P·P°CÍPsP±C-PI, C%Ps PSP°P»PµP¶P°C,CH PrPs  
CÍPëP»CHPSPëC... P°P±Ps PīPsPjC-CḡPSPëC... C-PSPiC-P±C-C,PsCḡC-PI CYP2PŸ19,  
PSP°P»PµP¶P°C,CH PsPjPµPīCḡP°P·PsP» C,P° PµP·PsPjPµPīCḡP°P·PsP»,  
C,,P»CfPIPsPeCÍP°PjC-PS, C,,P»CfPsPeCÍPµC,PëPS, PjPsPeP»PsP±PµPjC-Pr,  
PIPsCḡPëPePsPSP°P·PsP», C,,P»CfPePsPSP°P·PsP», C,PëPeP»PsPīC-PrPëPS,  
PeP°CḡP±P°PjP°P·PµPīC-PS, PµC,,P°PIC-CḡPµPSC†.

## *P†PSPiC-P±C-C,PsCḡPë PīCḡPsC,PsPSPSPC— PīPsPjPīPë*

P—P°CÍC,PsCÍCfPIP°PSPSCÍ PsPjPµPīCḡP°P·PsP»Cf 80 PjPi 1 CḡP°P· PSP° PrPsP±Cf,  
CÍPePëPNë PīCḡPëP·PSP°C†P°PICÍCÍ P°P±Ps Cf C,PsPNë P¶Pµ C†P°CÍ, C%Ps C-  
PeP»PsPīC-PrPsPiCḡPµP»CH, P°P±Ps P· C-PSC,PµCḡPIP°P»PsPj Cf 12 PīPsPrPëPS PjC-P¶  
P·P°CÍC,PsCÍCfPIP°PSPSCÍPj C†PëC... PrPIPsC... PīCḡPµPīP°CḡP°C,C-PI, P·PjPµPSC€CfPIP°P»Ps  
PµPeCÍPīPsP·PëC†C-Cḡ P°PeC,PëPIPSPsPiPs PjPµC,P°P±PsP»C-C,Cf PSP° 45 % (PīC-CÍP»CÍ  
P·P°CÍC,PsCÍCfPIP°PSPSCÍ PSP°PIP°PSC,P°P¶CfPIP°P»CHPSPsC— PrPsP·Pë) C- PSP° 40 %  
(PSP° C,,PsPSC- P·P°CÍC,PsCÍCfPIP°PSPSCÍ PīC-PrC,CḡPëPjCfCḡC†PsC— PrPsP·Pë). PīPµ  
P·PSPëP¶PµPSPSCÍ PµPeCÍPīPsP·PëC†C-C— CÍCfPīCḡPsPIPsPrP¶CfPIP°P»PsCÍCÍ  
P·PjPµPSC€PµPSPSCÍPj C-PSPiC-P±CfPIP°PSPSCÍ P°PīCḡPµPīP°C†C-C—  
C,CḡPsPjP±PsC†PëC,C-PI PSP° 39 % (PīC-CÍP»CÍ P·P°CÍC,PsCÍCfPIP°PSPSCÍ  
PSP°PIP°PSC,P°P¶CfPIP°P»CHPSPsC— PrPsP·Pë) C- PSP° 21 % (PSP° C,,PsPSC-  
P·P°CÍC,PsCÍCfPIP°PSPSCÍ PīC-PrC,CḡPëPjCfCḡC†PsC— PrPsP·Pë). PhC†C-PeCfC”C,CHCÍCÍ,  
C%Ps PµP·PsPjPµPīCḡP°P·PsP» P±CfPrPµ PICÍC,CfPīP°C,Pë P· PeP»PsPīC-PrPsPiCḡPµP»PµPj Cf  
PīPsPrC-P±PSCf PIP·P°C”PjPsPrC-Cḡ.

P’ PsP±CÍPµCḡPIP°C†C-PNëPSPëC... C,P° PeP»C-PSC-C†PSPëC... PrPsCÍP»C-PrP¶PµPSPSCÍC...  
PsC,CḡPëPjP°PSPs CÍCfPīPµCḡPµC†P»PëPIC- PrP°PSC- C%PsPrPs PeP»C-PSC-C†PSPsC—  
P·PSP°C†CfC%PsCÍC,C- C†C-C”C—  
C,,P°CḡPjP°PePsPeC-PSPµC,PëC†PSPsC—/C,,P°CḡPjP°PePsPrPëPSP°PjC-C†PSPsC—  
PIP·P°C”PjPsPrC-C— PrP»CÍ CḡPëP·PëPeCf CḡPsP·PIPëC,PeCf CÍPµCḡPNëPsP·PSPëC...  
CÍPµCḡC†PµPIPs-CÍCfPrPëPSPSPëC... PīPsPrC-PNë. PīPe P·P°PīPsP±C-P¶PSPëPNë P·P°C...C-Pr  
PsPrPSPsC†P°CÍPSPsPiPs P·P°CÍC,PsCÍCfPIP°PSPSCÍ PsPjPµPīCḡP°P·PsP»Cf P°P±Ps  
PµP·PsPjPµPīCḡP°P·PsP»Cf CḡPµPePsPjPµPSPrCfC”C,CHCÍCÍ CfPSPëPeP°C,Pë (PrPëPI.  
CḡPsP·PrC-P» B«PhCÍPsP±P»PëPIPsCÍC,C- P·P°CÍC,PsCÍCfPIP°PSPSCÍB»).

PµCḡPë P·P°CÍC,PsCÍCfPIP°PSPSC- PīP°PSC,PsPīCḡP°P·PsP»Cf P°P±Ps  
P»P°PSCfPsPīCḡP°P·PsP»Cf CÍPīPsCÍC,PµCḡC-PiP°P»PsCÍCÍ PjPµPSC€ PIPëCḡP°P¶PµPSPµ  
P·PjPµPSC€PµPSPSCÍ PµPeCÍPīPsP·PëC†C-C— PjPµC,P°P±PsP»C-C,Cf



PeP»PsPİC-PrPsPiCḡPμP»Cḡ.

PkP° C,,PsPSC- PsPrPSPSc†P°CİPSPsPiPs P»C-PeCrPIP°PSPSCİ PİP°PSC,PsPİCḡP°P·PsP»PsPj 80  
PjPi 1 CḡP°P· PSP° PrPsP±Cr PİP»P°P·PjPsPIC- PePsPSC†PμPSC,CḡP°C†C-C—  
P°PeC,PëPIPSPsPiPs PjPμC,P°P±PsP»C-C,Cr P·PjPμPSC€CrPIP°P»PëCİCİ PSP° 20 %  
(PİC-CİP»Cİ P·P°CİC,PsCİCİPIP°PSPSCİ PSP°PIP°PSC,P°P¶CİPIP°P»CHPSPsC— PrPsP·Pë) C-  
PSP° 14 % (PSP° C,,PsPSC- P·P°CİC,PsCİCİPIP°PSPSCİ PİC-PrC,CḡPëPjCrCḡC†PsC— PrPsP·Pë).  
PİPμ CİCİPICḡPsPIPsPrP¶CİPIP°P»PsCİCİ P·PSPëP¶PμPSPSCİPj C-PSPİC-P±CrPIP°PSPSCİ  
P°PiCḡPμPiP°C†C-C— C,CḡPsPjP±PsC†PëC,C-PI PSP° 15 % C- PSP° 11 % PIC-PrPİPsPIC-PrPSPs.  
PİC- CḡPμP·CrP»CHC,P°C,Pë PIPEP°P·CrCḡC,CH PSP° C,Pμ, C°Ps PeP»PsPİC-PrPsPiCḡPμP»CH  
PjPsP¶PSP° P·P°CİC,PsCİPsPICrPIP°C,Pë CḡP°P·PsPj C-P· PİP°PSC,PsPİCḡP°P·PsP»PsPj.

PkP°CḡP°P·C- PIC-PrCİCİC,PSC- PrPsPeP°P·PsPIC- PrP°PSC- PSP° PePsCḡPëCİC,CH C,PsPiPs,  
C°Ps C-PSC€C- P»C-PeP°CḡCİCHPeC- P·P°CİPsP±Pë, CİPeC- P·PSPëP¶CİCḡC,CH  
PePëCİP»PsC,PSC-CİC,CH C€P»CrPSPePsPIPsPiPs CİPsPeCr, PSP°PİCḡPëPeP»P°Pr,  
P±P»PsPeP°C,PsCḡPë PiC-CİC,P°PjC-PSPsPIPëC... CḡPμC†PμPiC,PsCḡC-PI Pk2 (PeCḡC-Pj  
C†PëPjPμC,PëPrPëPSCr, C°Ps C” C-PSPİC-P±C-C,PsCḡPsPj CYP2C19) P°P±Ps  
P°PSC,P°C†PëPrPë, PİPİP»PëPIP°CḡC,CH PSP° P°PSC,PëC,CḡPsPjP±PsC†PëC,P°CḡPSCr  
P°PeC,PëPIPSC-CİC,CH PeP»PsPİC-PrPsPiCḡPμP»Cḡ.

P’CžCİC,PμCḡPSP° P°PSC,PëCḡPμC,CḡPsPIC-CḡCžCİPSP° C,PμCḡP°PİC-Cİ

Pj PİP°C†C-C”PSC,C-PI P· P’P†P», CİPeC- PsC,CḡPëPjCrCḡC,CH P±CrCİC,PμCḡPSCr  
P°PSC,PëCḡPμC,CḡPsPIC-CḡCrCİPSCr C,PμCḡP°PİC-Cḡ (PḡP Pḡ), C-CİPSCrC” PİPëCİPsPePëPμ  
CḡPëP·PëPe PİPëPSPëPePSPμPSPSCİ CİCİPrPëPSPSPëC... PİPsPrC-Pμ.

PŸCrC,C,C”PIPs P·PSPëP¶PμPSPμ C-PSPİC-P±CrPIP°PSPSCİ C,CḡPsPjP±PsC†PëC,C-PI  
CİPİPsCİC,PμCḡC-PİP°P»PsCİCİ Cr PİP°C†C-C”PSC,C-PI P· P’P†P», CİPeC-  
PsC,CḡPëPjCrPIP°P»Pë PḡP Pḡ, PİC-PrCİPëP»PμPSCr CḡPëC,PsPSP°PIC-CḡPsPj P°P±Ps  
PePsP±C-C†PëCİC,P°C,PsPj. PİPsC†P° PeP»C-PSC-C†PSP° P·PSP°C†CrC°C-CİC,CH C†PëC...  
PrP°PSPëC... C” PSPμPIPëP·PSP°C†PμPSPsCḡ, PsC,CḡPëPjP°PSPs CİPİPsPSC,P°PSPSC-  
PİPsPIC-PrPsPjP»PμPSPSCİ PİCḡPs P’P†P>-C-PSC,,C-PePsPIP°PSPëC... PİP°C†C-C”PSC,C-PI,  
CİPeC- PsC,CḡPëPjCrPIP°P»Pë PḡP Pḡ, PİC-PrCİPëP»PμPSCr CḡPëC,PsPSP°PIC-CḡPsPj, C-  
CİPeC- PİPμCḡPμPSPμCİP»Pë PİPsPIC,PsCḡPSC- PsPeP»CḡP·C-PμPSC- CİPIPëC°P°  
PİC-CİP»Cİ PrPμ PsP±CİC,CḡCrPeC†C-C— P°P±Ps C,CḡPsPjP±PsC,PëC†PSC- PİPsPrC-C— PSP°  
C,,PsPSC- CİC...PμPjPë P»C-PeCrPIP°PSPSCİ CrPrP°CḡPSPëPjPë PrPsP·P°PjPë  
PeP»PsPİC-PrPsPiCḡPμP»Cḡ. PμCḡPë PsPrPSPSc†P°CİPSPsPjCr P·P°CİC,PsCİCİPIP°PSPSC-  
PeP»PsPİC-PrPsPiCḡPμP»Cḡ C,P° CḡPëC,PsPSP°PIC-CḡCr PjPsP¶Pμ P±CrC,Pë P·PSPëP¶PμPSPμ  
CİPμCḡPμPrPSC” C-PSPİC-P±CrPIP°PSPSCİ C,CḡPsPjP±PsC†PëC,C-PI.

PŸP°PePëPj C†PëPSPsPj, CİP»C-Pr PIC-PrPjPsPIP»CİC,PëCİCİ PIC-Pr PsPrPSPSc†P°CİPSPsPiPs  
P·P°CİC,PsCİCİPIP°PSPSCİ PeP»PsPİC-PrPsPiCḡPμP»Cḡ P· P±CrCİC,PμCḡPSPsCḡ PḡP Pḡ.

P†PSC€C- P»C-PeP°CḡCİCHPeC- P·P°CİPsP±Pë

PkPμ CİPİPsCİC,PμCḡC-PİP°P»PsCİCİ PeP»C-PSC-C†PSPs P·PSP°C†PëPjPsC—  
C,,P°CḡPjP°PePsPrPëPSP°PjC-C†PSPsC— PIP·P°C”PjPsPrC-C— PİC-Pr C†P°Cİ  
PsPrPSPSc†P°CİPSPsPiPs P·P°CİC,PsCİCİPIP°PSPSCİ PeP»PsPİC-PrPsPiCḡPμP»Cḡ C,P°  
P°C,PμPSPsP»PsP»Cr, PSC-C,,PμPrPëPİC-PSCr P°P±Ps P°C,PμPSPsP»PsP»Cr C,P°  
PSC-C,,PμPrPëPİC-PSCr. P’C-P»CHC€Pμ C,PsPiPs, PsPrPSPSc†P°CİPSPμ  
P·P°CİC,PsCİCİPIP°PSPSCİ C,,PμPSPsP±P°CḡP±C-C,P°P»Cr P°P±Ps PμCİC,CḡPsPiPμPSCr PSPμ  
PjP°C” CİCİC,C,C”PIPsPiPs PİPİP»PëPICr PSP° C,,P°CḡPjP°PePsPrPëPSP°PjC-C†PSCr

P°PeC, PēPIPSC-ĆĬC, CH PeP»PsPĭC-PrPsPiCĤPμP»CĤ.

PαP°CĤPjP°PePsPeC-PSPμC, PēC±PSC- PĭPsPeP°P·PSPēPePē PrPēPiPsPeĆĬPēPSCr P°P±Ps C, PμPsC,, C-P»C-PSCr PSPμ P·PjC-PSCĤPIP°P»PēĆĬCH Cr CĤP°P·C- C—C...  
PsPrPSPsC±P°ĆĬPSPsPiPs P·P°ĆĬC, PsĆĬCrPIP°PSPSCĬ P· PeP»PsPĭC-PrPsPiCĤPμP»PμPj.  
PĥPSC, P°C†PēPrPSC- P·P°ĆĬPsP±Pē PSPμ P·PjPμPSC€CrPIP°P»Pē P°P±ĆĬPsCĤP±C†C-CĤ  
PeP»PsPĭC-PrPsPiCĤPμP»CĤ.

P"°PSC-, PsPrPμCĤP¶P°PSC- PI C...PsPrC- PrPsĆĬP»C-PrP¶PμPSCĤ P·  
PjC-PeCĤPsĆĬPsPjP°PjPē PĭPμC±C-PSPePē P»CĤPrPēPSPē, ĆĬPIC-PrC±P°C, CH PĭCĤPs C, Pμ,  
C%Ps PeP°CĤP±PsPeĆĬPēP»CHPSPēPNē PjPμC, P°P±PsP»C-C, PeP»PsPĭC-PrPsPiCĤPμP»CĤ  
PjPsP¶Pμ PĭCĤPēPiPSC-C±CrPIP°C, Pē P°PeC, PēPIPSC-ĆĬC, CH C†PēC, PsC...CĤPsPjCr P 4502PŸ9.  
PĭPμ PĭPsC, PμPSC†C-PNēPSPs PjPsP¶Pμ PĭCĤPēP·PIPPrPēC, Pē PrPs PĭC-PrPIPēC%PμPSPSCĬ Cr  
PĭP»P°P·PjC- PeCĤPsPIC- PePsPSC†PμPSC, CĤP°C†C-C— PrPμCĬPePēC...  
P»C-PeP°CĤĆĬCHPePēC... P·P°ĆĬPsP±C-PI, C, P°PePēC... CĬPe C,, PμPSC-C, PsC—PS C, P°  
C, PsP»P±CrC, P°PjC-Pr, P° C, P°PePsP¶ PĶPμP—P—, CĬPeC- PjPμC, P°P±PsP»C-P·CrCĤC, CHĆĬCĬ  
P·P° PrPsPĭPsPjPsPiPsCĤ C†PēC, PsC...CĤPsPjCr P 4502PŸ9. P"°PSC- PrPsĆĬP»C-PrP¶PμPSPSCĬ  
PŸPĥP RIE ĆĬPIC-PrC±P°C, CH PĭCĤPs C, Pμ, C%Ps PsPrPSPsC±P°ĆĬPSPμ  
P·P°ĆĬC, PsĆĬPsPICrPIP°PSPSCĬ C,, PμPSC-C, PsC—PSCr C, P° C, PsP»P±CrC, P°PjC-PrCr P·  
PeP»PsPĭC-PrPsPiCĤPμP»PμPj C" P±PμP·PĭPμC±PSPēPj.

*P>C-PeP°CĤĆĬCHPeC- P·P°ĆĬPsP±Pē, ĆĬC±P±ĆĬC, CĤP°C, PsPj CĬPePēC... C" CYP2C8*

PμC-Pr C±P°ĆĬ PrPsĆĬP»C-PrP¶PμPSPSCĬ PSP° P·PrPsCĤPsPIPēC...  
PrPsP±CĤPsPIPsP»CHC†CĬC... PĭCĤPēP·PSP°C±PμPSPSCĬ PeP»PsPĭC-PrPsPiCĤPμP»CĤ  
PĭCĤPēP·PIPμP»Ps PrPs PĭC-PrPIPēC%PμPSPSCĬ PĭPēPIC-P»CHPSPμPSPSCĬ  
CĤPμPĭP°PiP»C-PSC-PrCr. P"°PSCĬP»C-PrP¶PμPSPSCĬ *in vitro* PĭPsPeP°P·P°P»Pē  
PĭC-PrPIPēC%PμPSPSCĬ PμPeĆĬPĭPsP·PēC†C-C— CĤPμPĭP°PiP»C-PSC-PrCr P·P°  
CĤP°C...CrPSPsPe PĭCĤPēPiPSC-C±PμPSPSCĬ CYP2C8 PĭP»CĤPeCrCĤPsPSC-PrPSPēPj  
PjPμC, P°P±PsP»C-C, PsPj PeP»PsPĭC-PrPsPiCĤPμP»CĤ. P§PμCĤPμP· CĤPēP·PēPe  
P·P±C-P»CHC€PμPSPSCĬ PePsPSC†PμPSC, CĤP°C†C-PNē PI PĭP»P°P·PjC- PeCĤPsPIC-, ĆĬP»C-Pr  
P· PsP±PμCĤPμP¶PSC-ĆĬC, CH PĭCĤPēP·PSP°C±P°C, Pē PsPrPSPsC±P°ĆĬPSPs  
PeP»PsPĭC-PrPsPiCĤPμP»CH C- P»C-PeP°CĤĆĬCHPeC- P·P°ĆĬPsP±Pē, CĬPeC- Cr PĭPμCĤC€Cr  
C±PμCĤPiCr PĭPēPIPsPrCĬC, CHĆĬCĬ P·P° CĤP°C...CrPSPsPe PjPμC, P°P±PsP»C-P·PjCr CYP2C8  
(PSP°PĭCĤPēPeP»P°Pr, CĤPμPĭP°PiP»C-PSC-Pr, PĭP°PeP»C-C, P°PeĆĬPμP») (PrPēPI. CĤPsP·PrC-P»  
B«PĥĆĬPsP±P»PēPIPsĆĬC, C- P·P°ĆĬC, PsĆĬCrPIP°PSPSCĬB»).

*P PsP·C±PIP°ĆĬC, P°C, PēPS*

P'CrP»Ps PĭPsPeP°P·P°PSPs, C%Ps PeP»PsPĭC-PrPsPiCĤPμP»CH P·P±C-P»CHC€CrC"  
PμPeĆĬPĭPsP·PēC†C-CĤ CĤPsP·CrPIP°ĆĬC, P°C, PēPSCr Cr PĭP°C†C-C"PSC, C-PI PI 1,4 CĤP°P·Pē  
(AUC) P±PμP· PĭP»PēPICr PSP° PŸmax PĭC-ĆĬP»CĬ PĭPsPIC, PsCĤPSPsPiPs PĭCĤPēPNēPsPjCr  
PeP»PsPĭC-PrPsPiCĤPμP»CĤ PI PrPsP·C- 75 PjPi.

*P†PSC€C- P»C-PeP°CĤĆĬCHPeC- P·P°ĆĬPsP±Pē, C%Ps P·P°ĆĬC, PsĆĬPsPIC±CĤC, CHĆĬCĬ  
PsPrPSPsC±P°ĆĬPSPs P· P°C†PμC, PēP»ĆĬP°P»C-C†PēP»PsPIPsCĤ PePēĆĬP»PsC, PsCĤ*

PjCĤPēPePsP·CrCĤPēC±PSC- P·P°ĆĬPsP±Pē (P±PμPSP·PsPĭCĤPsPjP°CĤPsPS,  
PĭCĤPsP±PμPSPμC†PēPr, ĆĬCrP»CHC,, C-PSPĭC-CĤP°P·PsPS) ĆĬP»C-Pr  
P·P°ĆĬC, PsĆĬPsPICrPIP°C, Pē P· PsP±PμCĤPμP¶PSC-ĆĬC, CH, PsĆĬPeC-P»CHPePē  
P°C†PμC, PēP»ĆĬP°P»C-C†PēP»PsPIP° PePēĆĬP»PsC, P° PjPsP¶Pμ P·PSPēP¶CrPIP°C, Pē  
PμC,, PμPeC, PēPIPSC-ĆĬC, CH CrCĤPēPePsP·CrCĤPēC±PSPēC... P·P°ĆĬPsP±C-PI C€P»CĬC...PsPj

PePsPSPeCfC7PµPSC,PSPsPiPs PIPëPIPµPrPµPSPSCİ ÇİPµC±PsPIPsC— PePëCİP»PsC,Pë.

*P7bPµC,PsC,C7PµPeCİP°C,*

PŞPµC7PµP· PSP°CİPIPSC-CİC,CH Çİ ÇİPeP»P°PrC- P»C-PeP°C7CİCHPePsPiPs P·P°CİPsP±Cİ  
P7bP·PhP'P7PŸP7 P°CİPµC,PëP»CİP°P»C-CİPëP»PsPIPsC— PePëCİP»PsC,Pë  
PsPrPSPsC±P°CİPSPµ P·P°CİC,PsCİCİPIP°PSPSCİ PjPµC,PsC,C7PµPeCİP°C,Çİ Çİ PrPsP·P°C...  
PİPsPSP°Pr 20 PjPi/C,PëP¶PrPµPSC7 PIPëPjP°PiP°C” PsP±PµC7PµP¶PSPsCİC,C- Çİ  
P·PIb7™ CİP·PeCİ P· PjPsP¶P»PëPIC-CİC,CH PİC7PëPiPSC-C±PµPSPSCİ PSPëC7PePsPIPsPiPs  
PeP»C-C7PµPSCİCİ PjPµC,PsC,C7PµPeCİP°C,Çİ, C%oPs PjPsP¶Pµ PİC7PëP·PIPµCİC,Pë PrPs  
PjC-C”P»PsC,PsPeCİPëC±PSPsCİC,C-.

*PŸPµPSPsC,,PsPIC-C7*

PhPrPSPsC±P°CİPSPµ P·P°CİC,PsCİCİPIP°PSPSCİ C,PµPSPsC,,PsPIC-C7Cİ  
PrPëP·PsPİC7PsPeCİPëP»Cİ C,,CİPjP°C7P°C,Çİ C,P° PkPµP—P— PjPsP¶Pµ P·P±C-P»CHC€PëC,Pë  
C7PëP·PëPe PIPëPSPëPePSPµPSPSCİ PSPëC7PePsPIPsC— PSPµPrPsCİC,P°C,PSPsCİC,C-.

*P'P°P»CHPİC7PsC”PIP° PePëCİP»PsC,P°*

PhPrPSPsC±P°CİPSPµ P·P°CİC,PsCİCİPIP°PSPSCİ ÇİP°P»C-CİPëP»P°C,C-PI C-  
PIP°P»CHPİC7PsC”PIPsC— PePëCİP»PsC,Pë PjPsP¶Pµ PİC7PëPIPµCİC,Pë PrPs  
P·PSPëP¶PµPSPSCİ P·PIb7™ CİP·CİPIP°PSPSCİ PsCİC,P°PSPSCHPsC— P· P±C-P»PeP°PjPë C,P°  
C-PSPİC-P±CİPIP°PSPSCİ C—C— PjPµC,P°P±PsP»C-P·PjCİ, C%oPs PİC7PëP·PIPsPrPëC,CH PrPs  
PİC-PrPIPëC%oPµPSPSCİ C7C-PIPSC-PI P·P°PiP°P»CHPSPsC— C,P° PIC-P»CHPSPsC—  
PIP°P»CHPİC7PsC”PIPsC— PePëCİP»PsC,Pë PI ÇİPëC7PsPIP°C,CİC- PeC7PsPIC-. PµC7Pë  
PsPrPSPsC±P°CİPSPsPjCİ P·P°CİC,PsCİCİPIP°PSPSC- P· PIP°P»CHPİC7PsC”PIPsC7  
PePëCİP»PsC,PsC7 P°CİPµC,PëP»CİP°P»C-CİPëP»PsPIP° PePëCİP»PsC,P° PIPëC,C-CİPSCİC”  
C—C— P·C- P·PIb7™ CİP·PeCİ C-P· PİC7PsC,PµC—PSP°PjPë PİP»P°P·PjPë,  
PİC-PrPIPëC%oCİC7C±Pë C,PsPeCİPëC±PSC-CİC,CH PsCİC,P°PSPSCHPsC—.

*P'P°PeCİPëPSP° PİC7PsC,Pë PIC-C,C7CİPSPsC— PIC-CİPİPë*

PkPµ C7PµPePsPjPµPSPPrPsPIP°PSPs PİC7PëP·PSP°C±P°C,Pë PİP°CİC-C”PSC,P°Pj  
CİP°P»C-CİPëP»P°C,Pë PİC7PsC,CİPiPsPj C€PµCİC,Pë C,PëP¶PSC-PI PİC-CİP»Cİ  
PIP°PeCİPëPSP°CİC— PİC7PsC,Pë PIC-C,C7CİPSPsC— PIC-CİPİPë. P'PëPİP°PrPePë  
CİPëPSPrC7PsPjCİ P PµCİ PIPëPSPëPeP°P»Pë PİC-CİP»Cİ PİC7PëP·PSP°C±PµPSPSCİ  
CİP°P»C-CİPëP»P°C,C-PI PİC-Pr C±P°Cİ P·P°C...PIPsC7C7PIP°PSPSCİ PSP° PIC-C,C7CİPSCİ  
PIC-CİPİCİ.

*P7CİPµC,P°P·PsP»P°PjC-Pr*

P PµPePsPjPµPSPPrPsPIP°PSPs P· PsP±PµC7PµP¶PSC-CİC,CH P·P°CİC,PsCİPsPICİPIP°C,Pë  
CİP°P»C-CİPëP»P°C,Pë PsPrPSPsC±P°CİPSPs P· P°CİPµC,P°P·PsP»P°PjC-PrPsPj Çİ  
P·PIb7™ CİP·PeCİ P· PİC-PrPIPëC%oPµPSPëPj C7PëP·PëPePsPj PIPëPSPëPePSPµPSPSCİ  
PjPµC,P°P±PsP»C-C±PSPsPiPs P°CİPëPrPsP·Cİ.

PµC7Pë PsPrPSPsC±P°CİPSPsPjCİ P·P°CİC,PsCİCİPIP°PSPSC- PIPëCİPsPePëC... PrPsP·  
P°CİPµC,PëP»CİP°P»C-CİPëP»PsPIPsC— PePëCİP»PsC,Pë C,P°  
P°PSC,PëPrC-P°P±PµC,PëC±PSPëC... PİC7PµPİP°C7P°C,C-PI C-P· PİC7CİPİPë  
PİPsC...C-PrPSPëC... CİCİP»CHC,,PsPSC-P»CİPµC±PsPIPëPSPë PİPsCİPëP»C7C,CHCİCİ  
PİC-PİPsPiP»C-PePµPjC-C±PSPëPµ PµC,,PµPeC, PsCİC,P°PSPSC-C... P·P° C7P°C...CİPSPsPe  
PIPëC,C-CİPSPµPSPSCİ CİCİP»CHC,,PsPSC-P»CİPµC±PsPIPëPSPë, P·PIb7™ CİP·P°PSPsC— P·

РiСҢPsC,РµC—PSP°PjPë PïP»P°P·PjPë, P°C†PµC,PëP»CГP°P»C-C†PëP»PsPIPsCҢ  
PePëCГP»PsC,PsCҢ.

РµCҢPë PsPrPSPsC†P°CГPSPsPjCр P·P°CГC,PsCГCрPIP°PSPSC-  
P°C†PµC,PëP»CГP°P»C-C†PëP»PsPIPsC— PePëCГP»PsC,Pë P· PrPëPiPsPeCГPëPSPsPj  
PePsPSC†PµPSC,CҢP°C†C-CҢ PsCГC,P°PSPSCHbPsPiPs PI PïP»P°P·PjC- PeCҢPsPIC-  
PïC-PrPIPëC%oCрC",CHCГCҢ PIPSP°CГP»C-PrPsPe P·PSPëP¶PµPSPSCҢ PSPëCҢPePsPIPsC—  
PµPeCГPeCҢPµC†C-C—.

PŸPëCГC,РµPjPSC- PiP»CҢPePsPePsCҢC,PëPePsC—PrPë (PIPeP»CҢC†P°CҢC†Pë  
PiC-PrCҢPsPePsCҢC,PëP·PsPS, CҢPePëP№ P·P°CГC,PsCГPsPICрCҢC,CH PrP»CҢ  
P·P°PjC-CГPSPsC— C,РµCҢP°PïC-C— PïCҢPë C...PIPsCҢPsP±C- PhPrPrC-CГPsPSP°)  
P·PSPëP¶CрCҢC,CH CҢC-PIPµPSCҢ CГP°P»C-C†PëP»P°C,C-PI Cр PeCҢPsPIC- C,P°  
PïC-PrPIPëC%oCрCҢC,CH CҢPëP·PëPe PïPµCҢPµPrPsP·CрPIP°PSPSCҢ.

P†PSPiC-P±C-C,PsCҢPë P°PSPiC-PsC,РµPSP·PëPSPiPµCҢPµC,PIPsCҢCҢCҢC†PsPiPs  
C,,PµCҢPjPµPSC,Cр (PhPµPα) Cр PePsPjP±C-PSP°C†C-C— P· PIPëCГPsPePëPjPë PrPsP·P°PjPë  
P°C†PµC,PëP»CГP°P»C-C†PëP»PsPIPsC— PePëCГP»PsC,Pë CГPïCҢPëC†PëPSCҢCҢC,CH  
P·PSPëP¶PµPSPSCҢ PeP»CрP±PsC†PePsPIPsC— C,,C-P»CHC,CҢP°C†C-C— PIPSP°CГP»C-PrPsPe  
C-PSPiC-P±CрPIP°PSPSCҢ PIP°P·PsPrPëP»P°C,P°C,PsCҢPSPsPiPs РµC,,РµPeC,Cр  
PïCҢPsCГC,P°PiP»P°PSPPrPëPSC-PI C,P° P·PSPëP¶PµPSPSCҢ  
P°PSC,PëPiC-PiPµCҢC,РµPSP·PëPIPSPsPiPs РµC,,РµPeC,Cр.

*PкC-PePsCҢP°PSPPrPëP»*

PJ PïP°C†C-C"PSC,C-PI, CҢPeC- PsPrPSPsC†P°CГPSPs P·P°CГC,PsCГPsPICрCҢC,CH  
PSC-PePsCҢP°PSPPrPëP» C- PкPµP—P—, P·PsPeCҢPµPjP° P°C†PµC,PëP»CГP°P»C-C†PëP»PsPICр  
PePëCГP»PsC,Cр C- P»C-P·PëPSCр P°C†PµC,PëP»CГP°P»C-C†PëP»P°C,, C-CГPSCрC"  
PïC-PrPIPëC%oPµPSPëP№ CҢPëP·PëPe PIPëPSPëPePSPµPSPSCҢ C,CҢP¶PePëC...  
CрCГPeP»P°PrPSPµPSCҢ, C,P°PePëC... CҢPe CëP»CрPSPePsPIPs-PePëCëPePsPIC-  
PIPëCҢP°P·PePë, PïPµCҢC,,PsCҢP°C†C-CҢ C,P° PeCҢPsPIPsC,РµC†C- CëP»CрPSPePsPIPs-  
PePëCëPePsPIPsPiPs C,CҢP°PeC,Cр (PrPëPi. CҢPsP·PrC-P» B«PhCГPsP±P»PëPIPsCГC,C-  
P·P°CГC,PsCГCрPIP°PSPSCҢB»).

*P†PSCëC- PIPëPrPë PIP·P°C"PjPsPrC-P№ P· P°C†PµC,PëP»CГP°P»C-C†PëP»PsPIPsCҢ  
PePëCГP»PsC,PsCҢ*

РµPsPIC-PrPsPjP»CҢP»PsCГCҢ C,P°PePsP¶ PïCҢPs PIPëPiP°PrPePë PIP·P°C"PjPsPrC-C— P·  
C,P°PePëPjPë P»C-PeP°CҢCГCHPePëPjPë P·P°CГPsP±P°PjPë, C%oPs  
P·P°CГC,PsCГPsPICрCҢC,CHCГCҢ PsPrPSPsC†P°CГPSPs P·  
P°C†PµC,PëP»CГP°P»C-C†PëP»PsPIPsCҢ PePëCГP»PsC,PsCҢ Cр P±C-P»CHCë PIPëCГPsPePëC...  
(PïCҢPsC,PëP·P°PiP°P»CHPSPëC...) PrPsP·P°C...: C-PSPiC-P±C-C,PsCҢPë PhPµPα,  
P°C†PµC,P°P·PsP»P°PjC-Pr, PïCҢPsC,PëCГCрPrPsPjPSC- P·P°CГPsP±Pë (C,,PµPSC-C,PsC—PS C,P°  
PIP°P»CHPïCҢPsC"PIP° PePëCГP»PsC,P°), P±PµC,P°-P±P»PsPeP°C,PsCҢPë,  
PrC-CрCҢPµC,PëPePë C,P° PïPµCҢPsCҢP°P»CHPSC- PiC-PiPsPiP»C-PePµPjC-C†PSC-  
P·P°CГPsP±Pë.

*PhP»PePsPiPsP»CH*

PhP»PePsPiPsP»CH CГPïCҢPëCҢC" PïPsCëPePsPrP¶PµPSPSCҢ CГP»PëP·PsPIPsC—  
PsP±PsP»PsPSPePë PëPљPŸ C- PïCҢPsP»PsPSPiCрC" C†P°CГ PeCҢPsPIPsC,РµC†C-  
PIPSP°CГP»C-PrPsPe CГPëPSPµCҢPiC-P·PjCр P°C†PµC,PëP»CГP°P»C-C†PëP»PsPIPsC—

PePëCfP»PsC,Pë C- P°P»PePsPiPsP»Cf. PµP°C†C-C°PSC,P°Pj CfP»C-Pr PïPsPIC-PrPsPjPëC,Pë  
PiCfPs CfPëP·PëPe PïPsC€PePsPrP¶PµPSPSC¶ PsP±PsP»PsPSPePë PËPµPÿ C-  
PeCfPsPIPsC,PµC†C- PiCfPë PsPrPSPSc†P°CfPSPsPjC† P·P°CfC,PsCfC†PIP°PSPSC-  
P»C-PeP°CfCfCHPePsPiPs P·P°CfPsP±C† P· P°P»PePsPiPsP»PµPj, PsCfPsP±P»PëPIPs  
C¶PeC%Ps PIP¶PëPIP°PSPSC¶ P°P»PePsPiPsP»Cf C° C...CfPsPSC-C†PSPëPj C†Pë  
P·PSP°C†PSPëPj (PrPëPI. CfPsP·PrC-P» B«PhCfPsP±P»PëPIPsCfC,C-  
P·P°CfC,PsCfC†PIP°PSPSC¶B»).

P°C-C†CfPµC,PëC†PSC- P·P°CfPsP±Pë PI PePsPjP±C-PSP°C†C-C— P· PIPëCfPsPePëPjPë  
PrPsP·P°PjPë P°C†PµC,PëP»CfP°P»C-C†PëP»PsPIPsC— PePëCfP»PsC,Pë P·PSPëP¶CfCfC,CH  
PeP»C†P±PsC†PePsPIC† C,,C-P»CHC,CfP°C†C-Cf P·P°PIPrC¶PePë P·PSPëP¶PµPSPSCf  
CfPëPSC,PµP·C† PiCfPsCfC,P°PiP»P°PSPrPëPSC-PI C† PSPëCfPeP°C....

*P†PSC€C- PIPëPrPë PIP·P°C°PjPsPrC-C— P· PeP»PsPiC-PrPsPiCfPµP»PµPj C,P°  
P°C†PµC,PëP»CfP°P»C-C†PëP»PsPIPsCf PePëCfP»PsC,PsCf*

P°C-P»CHC€Pµ PSC-P¶ 30000 PïP°C†C-C°PSC,C-PI P±CfP°P»Pë C†C†P°CfC,CH C†  
PeP»C-PSC-C†PSPëC... PIPëPiCfPsP±C†PIP°PSPSC¶C... PePsPjP±C-PSP°C†C-C—  
PeP»PsPiC-PrPsPiCfPµP»Cf P· P°C†PµC,PëP»CfP°P»C-C†PëP»PsPIPsCf PePëCfP»PsC,PsCf C†  
PiC-PrC,CfPëPjC†CfC†PëC... PrPsP·P°C..., C¶PeC- PSPµ PïPµCfPµPIPëC%C†PIP°P»Pë 325 PjPi,  
C- PsC,CfPëPjC†PIP°P»Pë CfC-P·PSPsPjP°PSC-C,PSC- CfC†PiC†C,PSC- P»C-PeP°CfCfCHPeC-  
P·P°CfPsP±Pë, C† C,PsPjC† C†PëCfP»C- PrC-C†CfPµC,PëPePë, P±PµC,P°-  
P°PrCfPµPSPsP±P»PsPeP°C,PsCfPë, C-PSPiC-P±C-C,PsCfPë P¶PµPµ, P°PSC,P°PiPsPSC-CfC,Pë  
PeP°P»CHC†C-Cf, C...PsP»PµCfC,PµCfPëPSP·PSPëP¶CfCfC†C- P·P°CfPsP±Pë,  
PePsCfPsPSP°CfPSC- PIP°P·PsPrPëP»P°C,PsCfPë, PiCfPsC,PëPrC-P°P±PµC,PëC†PSC-  
PiCfPµPiP°CfP°C,Pë (PIPeP»CfC†P°CfC†Pë C-PSCfC†P»C-PS),  
PiCfPsC,PëPµPiC-P»PµPiC,PëC†PSC- P·P°CfPsP±Pë C,P° P°PSC,P°PiPsPSC-CfC,Pë  
PiP»C-PePsPiCfPsC,PµC—PSPsPIPëC... CfPµC†PµPiC,PsCfC-PI P†P†b/P†P†P°, P±PµP·  
PsP·PSP°Pe PeP»C-PSC-C†PSPs P·PSP°C†PëPjPsC— PSPµCfPiCfPëC¶C,P»PëPIPsC—  
PIP·P°C°PjPsPrC-C—.

PhPeCfC-Pj C-PSC,,PsCfPjP°C†C-C— C%PsPrPs PIP·P°C°PjPsPrC-C— P· PsPeCfPµPjPëPjPë  
P»C-PeP°CfCfCHPePëPjPë P·P°CfPsP±P°PjPë, C¶PeC† PSP°PIPµPrPµPSPs PIPëC%Pµ,  
PrP°PSPëC... PiCfPs PIP·P°C°PjPsPrC-Cf PePsPjP±C-PSP°C†C-C—  
P°C†PµC,PëP»CfP°P»C-C†PëP»PsPIP° PePëCfP»PsC,P°/PeP»PsPiC-PrPsPiCfPµP»CH P·  
PrPµC¶PePëPjPë C€PëCfPsPePs P·P°CfC,PsCfPsPIC†PIP°PSPëPjPë P»C-PeP°CfCfCHPePëPjPë  
P·P°CfPsP±P°PjPë, C%Ps PiCfPëP·PSP°C†P°CfC,CHCfC¶ PïP°C†C-C°PSC,P°Pj P·  
P°C,PµCfPsC,CfPsPjP±PsC,PëC†PSPsCf C...PIPsCfPsP±PsCf, PSPµPjP°C°, PsCfPeC-P»CHPePë  
PrPsCfP»C-PrP¶PµPSPSC¶ PSPµ PiCfPsPIPsPrPëP»PëCfC¶.

PïPe C- P· C-PSC€PëPjPë PïPµCfPsCfP°P»CHPSPëPjPë C-PSPiC-P±C-C,PsCfP°PjPë P2Y12,  
CfPiC-P»CHPSPµ PIPµPrPµPSPSC¶ P°PiPsPSC-CfC,C-PI PsPiC-PsC—PrC-PI PjPsP¶Pµ  
P·P°C,CfPëPjC†PIP°C,Pë C,P° P·PjPµPSC€C†PIP°C,Pë P°P±CfPsCfP±C†C-Cf  
PeP»PsPiC-PrPsPiCfPµP»Cf, PµPjPsPIC-CfPSPs, C†PµCfPµP· CfPiPsPIC-P»CHPSPµPSPµ  
PIPëPiPsCfPsP¶PSPµPSPSC¶ C€P»C†PSPeP°. PµP»C-PSC-C†PSP° P·PSP°C†C†C%C-CfC,CH  
PSPµPIC-PrPsPjP°. PÿP»C-Pr CfPsP·PiP»C¶PSC†C,Pë PrPsC†C-P»CHPSC-CfC,CH  
P·P°CfC,PsCfC†PIP°PSPSC¶ PïP°CfPµPSC,PµCfP°P»CHPSPsPiPs  
P°PSC,PëC,CfPsPjP±PsC,PëC†PSPsPiPs P·P°CfPsP±C† PïP°C†C-C°PSC,P°Pj P· PiPsCfC,CfPëPj  
PePsCfPsPSP°CfPSPëPj CfPëPSPrCfPsPjPsPj, C¶PeC- PïPsC,CfPµP±C†CfC,CH  
PsPrPSPSc†P°CfPSPsPiPs PIPµPrPµPSPSC¶ PjPsCfC,,C-PSC† P°P±Ps C-PSC€PëC...  
P°PiPsPSC-CfC,C-PI PsPiC-PsC—PrC-PI.

***PhCÍPsP±P»PëPIPsCÍC,C- P·P°CÍC,PsCÍC¿PIP°PSPSCÍ.***

*PлCĤPsPIPsC,PмC±C- C,P° PiPмPjP°C,PsP»PsPiC-C±PSC- CĤPsP·P»P°PrPë*

PJ P·PIBĤ™ CĤP·PeCr P· CĤPëP·PëPePsPj CĤPsP·PIPëC,PeCr PeCĤPsPIPsC,PмC±C- C,P° PiPмPjP°C,PsP»PsPiC-C±PSPëC... PîPsP±C-C±PSPëC... CĤPмP°PeC†C-PMë PiCĤPë PîPsCĤPIC- PI C...PsPrC- P»C-PeCrPIP°PSPSCÍ PeP»C-PSC-C±PSPëC... CÍPëPjPiC,PsPjC-PI, C%oPs P°CÍPsC†C-CĤCĤC,CHCÍCÍ P· PIPëPSPëPePSPмPSPSCÍPj PeCĤPsPIPsC,PмC±C-, CÍP»C-Pr C,PмCĤPjC-PSPsPIPs P·CĤPsP±PëC,Pë PeP»C-PSC-C±PSPëPMë P°PSP°P»C-P· PeCĤPsPIC- C,P°/P°P±Ps PiCĤPsPIPмCÍC,Pë PePsPSC,CĤPsP»CH C-PSCëPëC... PIC-PrPîPsPIC-PrPSPëC... PîPsPeP°P·PSPëPeC-PI (PrPëPI. CĤPsP·PrC-P» B«PмPsP±C-C±PSC- CĤPмP°PeC†C-C—B»). PhCÍPeC-P»CHPePë P»C-PeP°CĤCÍCHPePëPMë P·P°CÍC-P± PмP»PhP'PhPŸPм C" P°PSC,PëC,CĤPsPjP±PsC,PëC±PSPëPj PiCĤPмPiP°CĤP°C,PsPj, PrPs CÍPeP»P°PrCr CĤPePsPiPs PIC...PsPrCÍC,CH PrPIC- PrC-CĤC±C- CĤPмC±PsPIPëPSPë, PMëPsPiPs CÍP»C-Pr P·P°CÍC,PsCÍPsPICrPIP°C,Pë P· PsP±PмCĤPмP¶PSC-CÍC,CH PiP°C†C-C"PSC,P°Pj, CĤPeC- PjP°CĤC,CH PiC-PrPIPëC%oPмPSPëPMë CĤPëP·PëPe CĤPsP·PIPëC,PeCr PeCĤPsPIPsC,PмC±C-, PîPsPIBĤ™ CĤP·P°PSPëPMë P· C,CĤP°PIPjP°PjPë, C...C-CĤCrCĤPiC-C±PSPëPj PIC,CĤCrC±P°PSPSCÍPj P°P±Ps C-PSCëPëPjPë PîP°C,PsP»PsPiC-C±PSPëPjPë CÍC,P°PSP°PjPë, P° C,P°PePsP¶ Cr CĤP°P·C- P·P°CÍC,PsCÍCrPIP°PSPSCÍ PI PePsPjP±C-PSPsPIP°PSC-PMë C,PмCĤP°PiC-C— P· C-PSCëPëPjPë PкPмP—P—, Cr C,PsPjCr C±PëCÍP»C- P· C-PSPiC-P±C-C,PsCĤP°PjPë P|PhP"-2, PiPмPiP°CĤPëPSPsPj, C-PSPiC-P±C-C,PsCĤP°PjPë PiP»C-PePsPiCĤPsC,PмC—PSPsPIPëC... CĤPмC†PмPiC,PsCĤC-PI P†P†b/P†P†P°, PŸP†P—P—PŸ, PîPsC,CrP¶PSPëPjPë C-PSPrCrPeC,PsCĤP°PjPë CYP2C19, C,CĤPsPjP±PsP»C-C,PëPeP°PjPë P°P±Ps C-PSCëPëPjPë P»C-PeP°CĤCÍCHPePëPjPë P·P°CÍPsP±P°PjPë, CĤPeC- PiC-PrPIPëC%oCrCĤC,CH CĤPëP·PëPe CĤPsP·PIPëC,PeCr PeCĤPsPIPsC,PмC±C-, C,P°PePëPjPë CĤPe PiPмPSC,PsPeCÍPëC,,C-P»C-PS (PrPëPI. CĤPsP·PrC-P» B«P'P·P°C" PjPsPrC-CĤ P· C-PSCëPëPjPë P»C-PeP°CĤCÍCHPePëPjPë P·P°CÍPsP±P°PjPë C,P° C-PSCëC- PIPëPrPë PIP·P°C" PjPsPrC-PMëB»). PкPмPsP±C...C-PrPSPs PIPмCÍC,Pë CĤPмC,PмP»CHPSPм CÍPiPsCÍC,PмCĤPмP¶PмPSPSCÍ P·P° CÍC,P°PSPsPj PîP°C†C-C"PSC,C-PI P· PjPмC,PsCĤ PIPëCĤPIP»PмPSPSCÍ P±CrPrCH-CĤPePëC... PsP·PSP°Pe PeCĤPsPIPsC,PмC±C-, Cr C,PsPjCr C±PëCÍP»C- PiCĤPëC...PsPIP°PSPsC—, PsCÍPsP±P»PëIPs PiCĤPsC,CĤPiPsPj PiPмCĤCëPëC... C,PëP¶PSC-PI P»C-PeCrPIP°PSPSCÍ C,P°/P°P±Ps PiC-CÍP»CĤ C-PSPIP°P·PëPIPSPëC... PeP°CĤPrC-PsP»PsPiC-C±PSPëC... PiCĤPsC†PмPrCrCĤ P°P±Ps C...C-CĤCrCĤPiC-C±PSPsPiPs PIC,CĤCrC±P°PSPSCÍ. PкPм CĤPмPePsPjPмPSPrCrC"C,CHCÍCÍ PsPrPSPsC±P°CÍPSPм P·P°CÍC,PsCÍCrPIP°PSPSCÍ P»C-PeP°CĤCÍCHPePsPiPs P·P°CÍPsP±Cr PмP»PhP'PhPŸPм P· PiPмCĤPsCĤP°P»CHPSPëPjPë P°PSC,PëPePsP°PiCrP»CĤPSC,P°PjPë, PsCÍPeC-P»CHPePë C†Pм PjPsP¶Pм PiPsCÍPëP»PëC,Pë C-PSC,PмPSCÍPëPIPS-CÍC,CH PeCĤPsPIPsC,PмC±C- (PrPëPI. CĤPsP·PrC-P» B«P'P·P°C" PjPsPrC-CĤ P· C-PSCëPëPjPë P»C-PeP°CĤCÍCHPePëPjPë P·P°CÍPsP±P°PjPë C,P° C-PSCëC- PIPëPrPë PIP·P°C" PjPsPrC-PMëB»).).

PмPмCĤPмPr P±CrPrCH-CĤPePsCĤ P·P°PiP»P°PSPsPIP°PSPsCĤ PsPiPмCĤP°C†C-C"CĤ, P° C,P°PePsP¶ PiPмCĤPмPr PiPsC±P°C,PePsPj P·P°CÍC,PsCÍCrPIP°PSPSCÍ P±CrPrCH-CĤPePsPiPs PSPsPIPsPiPs P»C-PeP°CĤCÍCHPePsPiPs P·P°CÍPsP±Cr, PiP°C†C-C"PSC,Pë PîPsPIPëPSPSC- PîPsPIC-PrPsPjP»CÍC,Pë P»C-PeP°CĤC-PI, Cr C,PsPjCr C±PëCÍP»C- CÍC,PsPjP°C,PsP»PsPiC-PI, PiCĤPs PiCĤPëPMëPsPj P»C-PeP°CĤCÍCHPePsPiPs P·P°CÍPsP±Cr PмP»PhP'PhPŸPм. PJ CĤP°P·C- PiPмCĤPмPrP±P°C†PмPSPsC— PiP»P°PSPsPIPsC— PsPiPмCĤP°C†C-C—, PiPsC,CĤC-P±PSPs PiPмCĤPмPiP»CĤPSCrC,Pë PSPмPsP±C...C-PrPSC-CÍC,CH P·P°CÍC,PsCÍCrPIP°PSPSCÍ PîPsPrPIC-PMëPSPsC— P°PSC,PëC,CĤPsPjP±PsC†PëC,P°CĤPSPsC— C,PмCĤP°PiC-C— PSP° PePsCĤPëCÍC,CH P·P°CÍC,PsCÍCrPIP°PSPSCÍ PsPrPSPsPiPs

P°PSC,PeC,CTjPsPjP±PsC,PeC±PSPsPiPs P»C-PeP°CTjCTjCHPePsPiPs P·P°CTjPsP±Cf. Pj  
PIPePiP°PrPeCf C,PePjC±P°CTjPsPiPs PiCTjPePiP°PSPµPSPSCj  
P°PSC,PeC,CTjPsPjP±PsC±PeC,P°CTjPSPsC— C,PµCTjP°PiC—C—, P»C-PeP°CTjCTjCHPePePN  
P·P°CTjC-P± PµP>PhP'PhPŸPµ PSPµPsP±C...C-PrPSPs PIC-PrPjC-PSPeC,Pe P·P° 7 PrPSC-PI PrPs  
C...C-CTjCTjPiC-C±PSPsPiPs PIC,CTjCTjC±P°PSPSCj.

P>C-PeP°CTjCTjCHPePePN P·P°CTjC-P± PµP>PhP'PhPŸPµ P·P±C-P»CHC€CfC" C±P°CTj  
PeCTjPsPiPsC,PµC±C-; PNµPsPiPs CTjP»C-Pr P·P°CTjC,PsCTjPsPICfPIP°C,Pe P·  
PsP±PµCTjPµP°PSC-CTjC,CT PiP°C±C-C"°PSC,P°Pj, CjPeC- PjP°CTjC,CH CfCTjP°P°PµPSPSCj,  
C%Ps PiC-PrPIPeC%CrCTjC,CH CTjC...PeP»CHPSC-CTjC,CH PrPs CTjPsP·PIPeC,PeCf  
PeCTjPsPiPsC,PµC± (P·PsPeCTjPµPjP° C€P»CfPSPePsPiPs-PePeC€PePsPiPeC... C,P°  
PIPSCfC,CTjC-C€PSCµPsPsC±PSPeC...).

PµP°C±C-C"°PSC,C-PI C,P°PePsP° CTjP»C-Pr PiPsPiPµCTjPµPrPeC,Pe PiCTjPs PjPsP°P»PePiPµ  
P·P±C-P»CHC€PµPSPSCj C±P°CTjCf, PSPµPsP±C...C-PrPSPsPiPs PrP»Cj P·CfPiPePSPePe  
PeCTjPsPiPsC,PµC±C-, Cf CTjP°P·C- P·P°CTjC,PsCTjCfPIP°PSPSCj P»C-PeP°CTjCTjCHPePsPiPs  
P·P°CTjPsP±Cf PµP>PhP'PhPŸPµ, P° C,P°PePsP° PiCTjPs PSPµPsP±C...C-PrPSC-CTjC,CH  
PiPsPIC-PrPsPjP»CjC,Pe CTjPiPsC"°PjCf P»C-PeP°CTjPµPIC- PiCTjPs PiPePSPePePSPµPSPSCj Cf  
PSPeC... P±CfPrCH-CjPePsC— PSPµP·PIPeC±PSPsC— PeCTjPsPiPsC,PµC±C- (P·P°  
P»PsPeP°P»C-P·P°C±C-C"°CT P°P±Ps C,CTjPePiP°P»C-CTjC,CT).

*PjCTjPsPjP±PsC,PeC±PSP° C,CTjPsPjP±PsC±PeC,PsPiPµPSC-C±PSP° PiCáCTjPiCáCTjP° (PŸPŸPµ)*

P"°CfP°Pµ CTjC-PrPePs PIC-PrP·PSP°C±P°P»PeCTjCj PIPePiP°PrPePe CTjPsP·PIPeC,PeCf PŸPŸPµ  
PSP° C,P»C- P·P°CTjC,PsCTjCfPIP°PSPSCj PeP»PsPiC-PrPsPiCTjPµP»CT, C-PSPePsP»Pe  
PSP°PIC-C,CH PiC-CTjP»Cj PSPµC,CTjPePiP°P»PsPiPs P·P°CTjC,PsCTjCfPIP°PSPSCj. PiPµ  
C...P°CTjP°PeC,PµCTjPeP·CfPIP°P»PsCTjCj C,CTjPsP±PsC±PeC,PsPiPµPSC-C"°CT C,P°  
PjC-PeCTjPsP°PSPiC-PsPiP°C,PeC±PSPsCT PiPµPjPsP»C-C,PeC±PSPsCT P°PSPµPjC-C"°CT Cf  
CTjPiPsP»CfC±PµPSPSC- P·PSPµPICCTjPsP»PsPiC-C±PSPsCT CTjPePjPiC,PsPjP°C,PePePsCT,  
PiPsCTjCfC€PµPSPSCjPjPe C„CfPSPeC±C-C— PSPeCTjPsPe P°P±Ps PiP°CTjCjC±PePsCT. PŸPŸPµ  
PjPsP°Pµ CTjC,P°PSPsPiPeC,Pe P·P°PiCTjPsP·Cf PrP»Cj P°PjPeC,C,Cj C- PiPsC,CTjPµP±CfC"  
PiCTjPsPiPµPrPµPSPSCj PSPµPIC-PrPeP»P°PrPSPeC... P»C-PeCfPIP°P»CHPSPeC...  
P·P°C...PsPrC-PI, PIPeP»CTjC±P°CTjC±Pe PiP»P°P·PjP°C„PµCTjPµP·.

*PkP°P±CáC,P° PiPµPjPsC„C-P»C-Cj*

PµPsPIC-PrPsPjP»CjP»PsCTjCj PiCTjPs PIPePiP°PrPePe CTjPsP·PIPeC,PeCf PSP°P±CfC,PsC—  
PiPµPjPsC„C-P»C-C— PiC-CTjP»Cj P·P°CTjC,PsCTjCfPIP°PSPSCj PeP»PsPiC-PrPsPiCTjPµP»CT. Pj  
CTjP°P·C- PiC-PrC,PIPµCTjPrP°PµPSPsPiPs C-P·PsP»CHPsPiP°PSPsPiPs  
P·P±C-P»CHC€PµPSPSCj P°PeC,PePiPsPiP°PSPsPiPs C±P°CTjC,PePsPiPsPiPs  
C,CTjPsPjP±PsPiP»P°CTjC,PePSPsPiPsPiPs C±P°CTjCf (PhPŸPŸPŸ), C%Ps  
CTjCfPiCTjPsPiPsPrP°CfC"°C,CHCTjCj P°P±Ps PSPµ CTjCfPiCTjPsPiPsPrP°CfC"°C,CHCTjCj  
PeCTjPsPiPsC,PµC±PµCT, PiPeC,P°PSPSCj PiCTjPs PrC-P°PiPSPsCTjC,CfPIP°PSPSCj  
PSP°P±CfC,PsC— PiPµPjPsC„C-P»C-C— PiPsPiPePSPs P±CfC,Pe CTjPsP·PiP»CjPSCfC,Ps.  
PµP°C±C-C"°PSC,Pe P· PiC-PrC,PIPµCTjPrP°PµPSPePj PrC-P°PiPSPsP·PsPj PSP°P±CfC,PsC—  
PiPµPjPsC„C-P»C-C— PiPsPiPePSPSC- P·PSP°C...PsPrPeC,PeCTjCj PiC-Pr PSP°PiP»CjPrPsPj  
P»C-PeP°CTjCj C- PsC,CTjPePjCfPIP°C,Pe P»C-PeCfPIP°PSPSCj; P·P°CTjC,PsCTjCfPIP°PSPSCj  
PeP»PsPiC-PrPsPiCTjPµP»CT C,P°PePePj PiP°C±C-C"°PSC,P°Pj PiPsC,CTjC-P±PSPs  
PiCTjPePiP°PSPeC,Pe.

*PkPµC%PsPrP°PIPSPs PiPµCTjPµPSPµCTjPµPSC- C,CTjP°PSP·PeC,PsCTjPSP° C-C€PµPjC-C±PSP°  
P°C,P°PeP° P°P±Ps C-PSCfCáP»CHC,*

P'CrP»Ps P·P°CfPIC-PrC±PμPSPs, C%Ps P·P°CfC,PsCfCfPIP°PSPSCf  
 PeP»PsPiC-PrPsPiCfPμP»Cf PI PePsPjP±C-PSP°CfC-C— P·  
 P°CfPμC,PēP»CfP°P»C-CfPēP»PsPIPsCf PePēCfP»PsC,PsCf Cr PīP°CfC-C"PSC,C-PI, CfPeC-  
 PSPμC%PsPrP°PIPsPs PīPμCfPμPSPμCfP»Pē C,CfP°PSP·PēC,PsCfPSCf C-CēPμPjC-CfPSCf  
 P°C,P°PeCf P°P±Ps C-PSCfCfP»CHC, C- PjP°CfC,CH PIPēCfPsPePēPNē CfPēP·PēPe  
 CfPsP·PIPēC,PeCf PīPsPIC,PsCfPSPēC... C-CēPμPjC-CfPSPēC... PīPsPrC-PNē, PīPsCfPēP»CfC"  
 PIPēCfP°PμPSCf PeCfPsPIPsC,PμCfCf. PŷP°PePēPj CfPēPSPsPj, CfP»C-Pr  
 PrPsC,CfPēPjCfPIP°C,PēCfCf PsP±PμCfPμPμPSPsCfC,C- Cr CfP°P·C- PrPsPrP°C,PePsPIPsPiPs  
 P·P°CfC,PsCfCfPIP°PSPSCf C,P°PePsC— PePsPjP±C-PSP°CfC-C—, PsPeCfC-Pj  
 PIPēPīP°PrPeC-PI, PrP»Cf CfPePēC... PrPsPIPμPrPμPSPs PSP°CfPIPsC-CfC,CH  
 CfPiCfPēCfC,P»PēPIPsPiPs PμC,,PμPeC,Cf C—C— P·P°CfC,PsCfCfPIP°PSPSCf.

*PiPēC,PsC...CfPsPj P 450 2Pŷ19 (CYP2Pŷ19)*

PαP°CfPjP°PePsPiPμPSPμC,PēPeP°

Pj PīP°CfC-C"PSC,C-PI C-P· PīPsPIC-P»CHPSPēPj PjPμC,P°P±PsP»C-P·PjPsPj CYP2Pŷ19 PīCfPē  
 P·P°CfC,PsCfCfPIP°PSPSC- PeP»PsPiC-PrPsPiCfPμP»Cf PI CfPμPePsPjPμPSPPrPsPIP°PSPēC...  
 PrPsP·P°C... CfC,PIPsCfCfC"C,CHCfCfCf PjPμPSCēPμ P°PeC,PēPIPsPsPiPs  
 PjPμC,P°P±PsP»C-C,Cf C,P° CfPīCfPēCfPēPSCfC"C,CHCfCfCf PjPμPSCēPēPNē PIPīP»PēPI PSP°  
 C,,CfPSPēCfC-Cf C,CfPsPjP±PsCfPēC,C-PI. P+CfPSCfCfC,CH C,PμCfC,Pē PrP»Cf  
 PIPēP·PSP°CfPμPSPSCf PīPμPSPsC,PēPīCf CYP2Pŷ19 PīP°CfC-C"PSC,P°.

PkCfPeC-P»CHPePē PjPμC,P°P±PsP»C-P·Pj PeP»PsPiC-PrPsPiCfPμP»Cf PI P°PeC,PēPIPsPēPNē  
 PjPμC,P°P±PsP»C-C, PIC-PrP±CfPIP°C"C,CHCfCfCf CfP°CfC,PePsPIPs P·P° PrPsPiPsPjPsPiPsCf  
 CYP2Pŷ19, P·P°CfC,PsCfCfPIP°PSPSCf P»C-PeP°CfCfCHPePēC... P·P°CfPsP±C-PI, C%Ps  
 PīCfPēPiPSC-CfCfCfC,CH P°PeC,PēPIPsC-CfC,CH C+CfHsPiPs C,,PμCfPjPμPSC,Cf,  
 PIC-CfPsPiC-PrPSPs, PīCfPēP·PIPsPrPēC,CH PrPs P·PSPēPμPμPSPSCf CfC-PIPsCf  
 P°PeC,PēPIPsPsPiPs PjPμC,P°P±PsP»C-C,Cf PeP»PsPiC-PrPsPiCfPμP»Cf. PŷP»C-PSC-CfPSP°  
 P·PSP°CfPēPjC-CfC,CH C,P°PePsC— PIP·P°C"PjPsPrC-C— PSPμ PIPēP·PSP°CfPμPSP°. PŷP»C-Pr  
 CfPSPēPeP°C,Pē PsPrPSPsCfP°CfPSPsPiPs P·P°CfC,PsCfCfPIP°PSPSCf  
 P»C-PeP°CfCfCHPePēC... P·P°CfPsP±C-PI, C%Ps PīCfPēPiPSC-CfCfCfC,CH  
 P°PeC,PēPIPsC-CfC,CH CYP2Pŷ19 (PrPēPI. CfPsP·PrC-P»Pē  
 B«PαP°CfPjP°PePsPeC-PSPμC,PēPeP°B» C,P° B«P·P·P°C"PjPsPrC-Cf P· C-PSCēPēPjPē  
 P»C-PeP°CfCfCHPePēPjPē P·P°CfPsP±P°PjPē C,P° C-PSCēC- PIPēPrPē PIP·P°C"PjPsPrC-PNēB»).

P'C-CfPsPiC-PrPSPs, C%Ps PIPēPePsCfPēCfC,P°PSPSCf P»C-PeP°CfCfCHPePēC...  
 P·P°CfPsP±C-PI, CfPeC- C-PSPPrCfPeCfCfC,CH P°PeC,PēPIPsC-CfC,CH CYP2Pŷ19,  
 PīCfPēP·PIPμPrPμ PrPs PīC-PrPIPēC%PμPSPSCf CfC-PIPsCf P°PeC,PēPIPsPsPiPs  
 PjPμC,P°P±PsP»C-C,Cf PeP»PsPiC-PrPsPiCfPμP»Cf C,P° PjPsPμPμ PīPsCfPēP»PēC,Pē  
 CfPēP·PēPe PeCfPsPIPsC,PμCfC-. PīPe P·P°PīPsP±C-PμPSPēPNē P·P°C...C-Pr  
 CfPμPePsPjPμPSPPrCfC"C,CHCfCfCf CfPSPēPeP°C,Pē CfPīC-P»CHPSPsPiPs  
 P·P°CfC,PsCfCfPIP°PSPSCf PīPsC,CfPμPSPēC... C-PSPPrCfPeC,PsCfC-PI CYP2Pŷ19 (PrPēPI.  
 CfPsP·PrC-P» B«PμPsP±C-CfPSC- CfPμP°PeCfC-C—B»).

*PŷCzP±CfC,CfP°C,Pē CYP2C8*

PkPμPsP±C...C-PrPSPs P· PsP±PμCfPμPμPSC-CfC,Cf PīCfPēP·PSP°CfP°C,Pē  
 PeP»PsPiC-PrPsPiCfPμP»CH PsPrPSPsCfP°CfPSPs P· P»C-PeP°CfCfCHPePēPjPē  
 P·P°CfPsP±P°PjPē, CfCfP±CfC,CfP°C,PsPj CfPePēC... C" CYP2C8 (PrPēPI. CfPsP·PrC-P»  
 B«P·P·P°C"PjPsPrC-Cf P· C-PSCēPēPjPē P»C-PeP°CfCfCHPePēPjPē P·P°CfPsP±P°PjPē C,P°  
 C-PSCēC- PIPēPrPē PIP·P°C"PjPsPrC-C—B»).



$$P_4P_4P_4C_7P_4C...C_7P_4C_7PSP^{\circ}C_7P_4P^{\circ}PeC,P\ddot{e}PIPSC-C_7C,CH\ P\ddot{i}PsPjC-P\eta$$

$$C,C-C''PSPsP\ddot{i}C-C_7P\ddot{e}PrP\ddot{e}PSC-PI$$

РµРµ°С†С-С"РSC,С-РІ СГР»С-Рг РїРµСђРµРµРІС-СђРёСёС,Рё РSP° РSP°СІРІРSC-СГС,Сђ РІ  
Р°РSP°РјРSPµР·С- РіС-РїРµСђСђС†С†С,Р»РёРІРPSСГС,С- РrPs С-РSCёРёС...  
С,С-С"РSPSPіС-СђРёРёРrРёРёРSC-РІ (С,Р°РёРёС... СІРё С,РёРёР»Р»SPіС-РrРёРPS,  
РіСђР°Р°С†С†РіРіСђРµРµР»Сђ), С,РSPјС† С%Ps РSP°РrС...РSPРёР»Р»Рё РїРPSРІС-РrPsРјР»РµРSPSCІ  
РіСђРPS РїРµСђРµС...СђРµС†РPSС† СђРµРµР°С,РёРІРSC-СГС,Сђ РіРPSРјС-Р¶  
С,С-С"РSPSPіС-СђРёРёРrРёРёРSC-РІ (РrРёРІ. СђРPSР·РrС-Р» В«РµРPSР±С-С†РSC-  
СђРµРµР°С†С-С—В»). Р—Р°СГС,РSCГ†РІРІ°РSPSCІ С,С-С"РSPSPіС-СђРёРёРrРёРёРSC-РІ РјРPSР¶РµРµ  
РіСђРёРёР·РІРµС†С,Рё РrPs РІРёРSPёРёРSPµРSPSCІ РІС-Рr Р»РµРіРёРёС... РrPs С,СІР¶РёРёРёС...  
Р°Р»РµРµСђРіРіС-С†РSPёС... СђРµРµР°С†С-Р№, С,Р°РёРёС... СІРё РІРёС†РёРіі, РSP°Р±СђСІРё  
РµРІС-РSPёРµ Р°Р±РPS РіРµРјР°С,РSP»РSPіС-С†РSPёС... СђРµРµР°С†С-Р№  
(С,СђРPSРјР±РPSС†РёС,РSPіРµРPSС-СІ С,Р° РSPµР№С,СђРSPРіРµРPSС-СІ). РµРµ°С†С-С"РSC,Рё,  
СІРёС- РјР°СђС,Сђ РІ Р°РSP°РјРSPµР·С- Р°Р»РµРµСђРіРіС-С†РSC- СђРµРµР°С†С-С— С-/Р°Р±РPS  
РіРµРјР°С,РSP»РSPіС-С†РSC- СђРµРµР°С†С-С— РSP° РSPРёРPS С,С-С"РSPSPіС-СђРёРёРPS,  
РјРPSР¶С†С,Сђ РјР°С,Рё РіС-РrРІРёС%РµРSPёР№ СђРёР·РёРё СђРPSР·РІРёС,РёС† С,С-С"С— Р¶  
Р°Р±РPS С-РSCёРPS— СђРµРµР°С†С-С— РSP° С-РSCёРёР№ С,С-С"РSPSPіС-СђРёРёРPS.  
РµРPSРSC-С,РSCђРёРPSРі РІС-РrРSPСГРSPS РіРµСђРµС...СђРµС†РSPС—  
СђРµРµР°С,РёРІРSPСГС,С- СђРµРPSРјРSPРrС†С"С,СђСГСІ.

$P\check{h}C\uparrow P\mu C, P\check{e}P\gg C\acute{I}P^{\circ}P\gg C-C\uparrow P\check{e}P\gg PsPIC\acute{z} P\check{e}P\check{e}C\acute{I}P\gg PsC,C\acute{z} C\acute{I}P\gg C-Pr P\cdot P^{\circ}C\acute{I}C, PsC\acute{I}C\acute{z}PIP^{\circ}C, P\check{e} C-P\cdot$   
 $PsP\pm P\mu C\check{h}P\mu P\uparrow PSC-C\acute{I}C, C\check{h}$ :

- PīP°C†C-C”PSC,P°Pj, C‖PeC- PjP°C‖C,CH PI P°PSP°PjPSPμP·C-  
P±C‖PsPSC...C-P°P»CHPSCr P°C†C,PjCr P°P±Ps P°P»PμC‖PiC-C†PSC- C‖PμP°PeC†C-C—,  
PsC†PeC-P»CHPePë PIPsPSPë PjPsP‖CrC,CH PiC-PrPIPëC%oCrPIP°C,Pë C‖PëP·PëPe  
PIPëPSPëPePSPμPSPSC‖ C‖PμP°PeC†C-PMo PiC-PrPIPëC%oPμPSPsC— C†CrC,P»PëPIPsC†C,C-;

- PīP°C†C-C"PSC,P°Pj P· PīPsPrP°PiCĤjPsCĤ, PsCÍPeC-P»CHbPePë  
P°C†PμC,PëP»CÍP°P»C-C†PëP»PsPIP° PePëCÍP»PsC,P° PSP°PIC-C,CH Cr PSPëP·CHbPePëC...  
PrPsP·P°C... PjPsP¶Pμ PīC-PrPIPëC‰CrPIP°C,Pë PePsPSC†PμPSC,CĤjP°C†C-CĤ CÍPμC†PsPIPsC—  
PePëCÍP»PsC,Pë;

- PrC-C,ClPj (PIC-PePsPj PrPs 18 C<sub>7</sub>PsPeC-PI), PsCl'PeC-P»CHbPePë PjPsP¶P»PëPIP°  
PIP·P°C''PjPsP·P°P»PµP¶PSC-Cl'C,CHb PjC-P¶ P·P°Cl'C,PsCl'CíPIP°PSPSC¶Pj  
P°C†PµC,PëP»Cl'P°P»C-C†PëP»PsPIPsC— PePëCl'P»PsC,Pë C,P° C<sub>7</sub>PsP·PIPëC,PePsPj  
Cl'PëPSPrC<sub>7</sub>PsPjCí P PµC¶. PÿPëPSPrC<sub>7</sub>PsPj P PµC¶ б҃ C†Pµ PrCíP¶Pµ C<sub>7</sub>C-PrPeC-Cl'PSPµ  
P·P°C...PIPsC<sub>7</sub>C<sub>7</sub>PIP°PSPSC¶, C%Ps PjPsP¶Pµ Cl'C,P°PSPsPIPëC,Pë P·P°PiC<sub>7</sub>PsP·Cí PrP»C¶  
P¶PëC,C,Cl;

- PīP°C†C-C°PSC,P°Pj C-P· PrPμC,,C-C†PēC,PsPj PiP»CḤPePsP·Ps-6-  
C,,PsC†C,,P°C,PrPμPiC-PrCḤPsPiPμPSP°P·Pē (G6PD) C†PμCḤPμP· CḤPēP·PēPe  
PIPēPSPēPePSPμPSPSC† PiPμPjPsP»C-P·Cr (PrPēPI. CḤPsP·PrC-P» B«PμPsP±C-C†PSC-  
CḤPμP°PeC†C-C—B»); Cr C,P°PePēC... PIPēPīP°PrPeP°C... C†PμPNē  
P»C-PeP°CḤC†CḤPePēPNē P·P°C†C-P± C†P»C-Pr P·P°C†C,PsC†PsPICrPIP°C,Pē PiC-Pr  
CḤPμC,PμP»CḤPSPēPj PSP°PiP»C†PrPsPj P»C-PeP°CḤC†;

- PIP°C†C-C°PSC,P°Pj, CIPeC- P·P»PsPIP¶PëPIP°CFC,CH P°P»PePsPiPsP»PµPj.  
PjP»PePsPiPsP»CH PjPsP¶Pµ P·P±C-P»CHC€CrPIP°C,Pë CjPëP·PëPe CrCjP°P¶PµPSPSCµ  
PëPjPj Pj PjCjPë PIP¶PëPIP°PSPSC- P°C†PµC,PëP»C†P°P»C-C†PëP»PsPSPC— PePëC†P»PsC,Pë.  
PµP°C†C-C°PSC,C-PI C†P»C-Pr PjCjPsPePsPSC†CrP»CHC,CrPIP°C,Pë C%PsPrPs CjPëP·PëPeCr

$P^{\circ}CrPrCH_3-CIPeP\ddot{e}PN_2$   $PSP_{\mu}PIP\ddot{e}PePsC\bar{H}P\ddot{e}C\bar{I}^{\circ}C, P^{\circ}PSP\ddot{e}PN_2$   $P \gg C-PeP^{\circ}C\bar{H}C\bar{I}^{\circ}CH_3PeP\ddot{e}PN_2$   
 $PiC\bar{H}P_{\mu}PiP^{\circ}C\bar{H}P^{\circ}C, P^{\circ}P \pm Ps$   $PIC-PrC...PsPrP\ddot{e}C\bar{I}^{\circ}P \gg C-PrC\bar{I}^{\circ}C, P\ddot{e}P \gg C-P \cdot CrPIP^{\circ}C, P\ddot{e}$   
 $PIC-PrPiPsPIC-PrPSPs$   $PrPs$   $PjC-C\bar{I}^{\circ}C \dagger PuPIP\ddot{e}C...PIP\ddot{e}PiPsPi$ .

$$P''PsP \cdot P\ddot{e}, C\%_oPsPrPsC\bar{H}C-PIPS\bar{C}\bar{H}C,CHC,P^oPiP_{\mu}C\bar{H}P_{\mu}PIP\ddot{e}C\%_oC\acute{z}C\bar{H}C,CH500PjPi/PrPsP\pm C\acute{z}$$



PeC-P»CHPePsCfC,C-. P»C-Pr C†P°Cf P·P°CfC,PsCfCfPIP°PSPSCf P»C-PeP°CfCfCHPePsPiPs  
P·P°CfPsP±Cf P»P»PhP'PhPŸP» CfP»C-Pr PíCfPëPiPëPSPëC,Pë PiPsPrCfPIP°PSPSCf  
PiCfCfPrPrCf.

P»PµCfC,PëP»CHPSC-CfC,CH

P°P°PSC- C%PsPrPs PIPiP»PëPICf PePsPjP±C-PSP°C†C-C—  
P°C†PµC,PëP»CfP°P»C-C†PëP»PsPIP° PePëCfP»PsC,P°/PeP»PsPiC-PrPsPiCfPµP»CH PSP°  
C,,PµCfC,PëP»CHPSC-CfC,CH PIC-PrCfCfC,PSC-.

P°PsCfP»C-PrP¶PµPSPSCf PSP° C,PIP°CfPëPSP°C... PiPsPeP°P·P°P»Pë, C%Ps  
PeP»PsPiC-PrPsPiCfPµP»CH PSPµ P·PjC-PSCfC" C,,PµCfC,PëP»CHPSPsCfC,C-.

PkPµPIC-PrPsPjPs, C†Pë P·PjC-PSCfC" C,,PµCfC,PëP»CHPSC-CfC,CH  
P°C†PµC,PëP»CfP°P»C-C†PëP»PsPIP° PePëCfP»PsC,P°.

P—PrP°C,PSC-CfC,CH PIPiP»PëPIP°C,Pë PSP° CëPIPëPrPeC-CfC,CH CfPµP°PeC†C-C— PíCfPë  
PePµCfCzPIP°PSPSC- P°PIC,PsC,CfP°PSCfPiPsCfC,PsPj P°P±Ps C-PSCëPëPjPë  
PjPµC...P°PSC-P·PjP°PjPë.

P>C-PeP°CfCfCHPePëPN P·P°CfC-P± P»P»PhP'PhPŸP» PSPµ PIPiP»PëPIP°C" P°P±Ps PjP°C"  
PSPµP·PSP°C†PSPëPN PIPiP»PëPI PSP° CëPIPëPrPeC-CfC,CH CfPµP°PeC†C-C— PíCfPë  
PePµCfCfPIP°PSPSC- P°PIC,PsC,CfP°PSCfPiPsCfC,PsPj P°P±Ps CfPsP±PsC,C- P· C-PSCëPëPjPë  
PjPµC...P°PSC-P·PjP°PjPë.

**PŸPiPsCfC-P± P·P°CfC,PsCfCzPIP°PSPSCf C,P° PrPsP·Pë.**

PŸPiPsCfC-P± P·P°CfC,PsCfCzPIP°PSPSCf

P>C-PeP°CfCfCHPePëPN P·P°CfC-P± PíCfPëP·PSP°C†PµPSPëPN PrP»Cf  
PiPµCfPsCfP°P»CHPSPsPiPs P·P°CfC,PsCfCfPIP°PSPSCf. PhPsP¶PSP°  
P·P°CfC,PsCfPsPICfPIP°C,Pë PSPµP·P°P»PµP¶PSPs PIC-Pr PíCfPëPN PsPjCf C—P¶C-.

P°PsP·CzPIP°PSPSCf

P°PsCfPsCfP»C- C,P° PíP°C†C-C" PSC,Pë P»C-C,PSCfPsPiPs PIC-PeCz

P>C-PeP°CfCfCHPePëPN P·P°CfC-P± P»P»PhP'PhPŸP», PePsPjP±C-PSPsPIP°PSPëPN  
PíCfPµPiP°CfP°C, C,,C-PeCfPsPIP°PSPëC... PrPsP·, P·P°CfC,PsCfPsPICfCfC,CH PíC-CfP»Cf  
C,PsPiPs, CfPë CfPsP·PiPsC†P°C,Ps P»C-PeCfPIP°PSPSCf PeP»PsPiC-PrPsPiCfPµP»PµPj C,P°  
P°C†PµC,PëP»CfP°P»C-C†PëP»PsPIP°Cf PePëCfP»PsC,PsCf Cí PIPëPiP»CfPrC-  
PsPeCfPµPjPëC... PíCfPµPiP°CfP°C,C-PI. P>C-PeP°CfCfCHPePëPN P·P°CfC-P±  
P»P»PhP'PhPŸP» PíCfPëP·PSP°C†P°CfC,CH 1 CfP°P· PSP° PrPsP±Cf.

PµP°C†C-C" PSC,Pë P· PiPsCfC,CfPëPj PePsCfPsPSP°CfPSPëPj CfPëPSPPrCfPsPjPsPj P±PµP·  
PiC-PrPN PsPjCz CfPµPiPjPµPSC,P° ST (PSPµCfC,P°P±C-P»CHPSP° CfC,PµPSPsPeP°CfPPrC-Cf  
P°P±Ps C-PSC,,P°CfPeC, PjC-PsPeP°CfPPrP° P±PµP· PíP°C,PsP»PsPiC-C†PSPsPiPs P·CzP±C†Cf Q)

PhPiC,PëPjP°P»CHPSCf C,CfPëPIP°P»C-CfC,CH P»C-PeCfPIP°PSPSCf

PsC,,C-C†C-PN<sub>2</sub>PSPs PSPμ PIC†C,P°PSPsPIP»PμPSP°. P°P°PSC- PeP»C-PSC-C†PSPëC...  
 PrPsC†P»C-PrP¶PμPSCĤ C†PIC-PrC†P°C,CH PSP° PePsCĤPëC†C,CH  
 P·P°C†C,PsC†C†PIP°PSPSC† P†CĤPμP†P°CĤP°C,C† PrPs 12 PjC-C†C†C†C-PI,  
 PjP°PeC†PëPjP°P»CHPSPëPN<sub>2</sub> P†PsP·PëC,PëPIPSPëPN<sub>2</sub> PμC,,PμPeC,  
 C†P†PsC†C,PμCĤC-P†P°PIC†C† C†PμCĤPμP· 3 PjC-C†C†C†C†C† (PrPëPI. CĤPsP·PrC-P»  
 B«PαP°CĤPjP°PePsP»PsPiC-C†PSC- PIP»P°C†C,PëPIPsC†C,C-B»). PJ CĤP°P·C-  
 P†CĤPëP†PëPSPμPSPSC† P·P°C†C,PsC†C†PIP°PSPSC† P»C-PeP°CĤC†CHPePsPiPs  
 P·P°C†PsP±C† PμP>PĥP'PĥPŸPμ P†P°C†C-C°PSC,P°Pj PjPsP¶Pμ P±C†C,Pë  
 PePsCĤPëC†PSPs P†CĤPsPrPsPIP¶PμPSPSC† P»C-PeC†PIP°PSPSC† C-P·  
 P·P°C†C,PsC†C†PIP°PSPSC†Pj PsPrPSPsPiPs P°PSC,PëC,CĤPsPjP±PsC,PëC†PSPsPiPs  
 P»C-PeP°CĤC†CHPePsPiPs P·P°C†PsP±C†.

*PμP°C†C-C°PSC,Pë P· PiPsC†C,CĤPëPj C-PSC,,P°CĤPeC,PsPj PjC-PsPeP°CĤPrP° P·  
 P†C-PrPN<sub>2</sub>PsPjPsPj C†PμPiPjPμPSC,P° ST*

P>C-PeC†PIP°PSPSC† C†P»C-Pr CĤPsP·P†PsC†PëPSP°C,Pë C†PePsPjPsPiP°  
 CĤP°PSC-C€Pμ P†C-C†P»C† P†PsC†PIPë C†PëPjP†C,PsPjC-PI C,P°  
 P†CĤPsPrPsPIP¶C†PIP°C,Pë P†CĤPsC,C†PiPsPj C%PsPSP°PN<sub>2</sub>PjPμPSC€Pμ 4  
 C,PëP¶PSC-PI. PμPμCĤPμPIP°PiPë P·P°C†C,PsC†C†PIP°PSPSC† PePsPjP±C-PSP°C†C-C—  
 P°C†PμC,PëP»C†P°P»C-C†PëP»PsPiPsC— PePëC†P»PsC,Pë C,P°  
 PeP»PsPiC-PrPsPiCĤPμP»CĤ P†CĤPsC,C†PiPsPj P±C-P»CHC€Pμ PSC-P¶ 4 C,PëP¶PSC-  
 P·P° PSP°C†PIPSPsC†C,C- C,P°PePsPiPs C†C,P°PSC† PSPμ PIPëPIC†P°P»PëC†C† (PrPëPI.  
 CĤPsP·PrC-P» B«PαP°CĤPjP°PePsP»PsPiC-C†PSC- PIP»P°C†C,PëPIPsC†C,C-B»). PJ  
 CĤP°P·C- P†CĤPëP†PëPSPμPSPSC† P·P°C†C,PsC†C†PIP°PSPSC†  
 P»C-PeP°CĤC†CHPePsPiPs P·P°C†PsP±C† PμP>PĥP'PĥPŸPμ P†P°C†C-C°PSC,P°Pj  
 PjPsP¶Pμ P±C†C,Pë PePsCĤPëC†PSPs P†CĤPsPrPsPIP¶PμPSPSC† P»C-PeC†PIP°PSPSC†  
 C-P· P·P°C†C,PsC†C†PIP°PSPSC†Pj PsPrPSPsPiPs P°PSC,PëC,CĤPsPjP±PsC,PëC†PSPsPiPs  
 P»C-PeP°CĤC†CHPePsPiPs P·P°C†PsP±C†.

PJ CĤP°P·C- P†CĤPsP†C†C†PeC† PrPsP·Pë:

- C†PeC%Ps P· PjPsPjPμPSC,C†, PePsP»Pë P†PsC,CĤC-P±PSPs P±C†P»Ps P†CĤPëPN<sub>2</sub>PjP°C,Pë  
 C†PμCĤPiPsPIC† PrPsP·C†, PjPëPSC†P»Ps PjPμPSC€Pμ 12 PiPsPrPëPS, P†P°C†C-C°PSC, PjP°C°  
 PSPμPiP°PN<sub>2</sub>PSPs P†CĤPëPN<sub>2</sub>PSC†C,Pë P†CĤPsP†C†C%PμPSC† PrPsP·C†, P° PSP°C†C,C†PiPSC†  
 PrPsP·C† PIP¶Pμ P†CĤPëPN<sub>2</sub>PjP°C,Pë C† P·PIPëC†PSPëPN<sub>2</sub> C†P°C†;

- C†PeC%Ps PjPëPSC†P»Ps P±C-P»CHC€Pμ 12 PiPsPrPëPS, P†P°C†C-C°PSC, PjP°C°  
 P†CĤPëPN<sub>2</sub>PSC†C,Pë PSP°C†C,C†PiPSC† PrPsP·C† PI P·PIPëC†PSPëPN<sub>2</sub> P·P°P†P»P°PSPsPIP°PSPëPN<sub>2</sub>  
 C†P°C†, PSPμ P†PsPrPIPSCĤCĤC†Pë PrPsP·C†.

*PαP°CĤPjP°PePsPiPμPSPμC,PëPeP°*

P—PSPëP¶PμPSPëPN<sub>2</sub> CYP2C19-PsPiPsC†PμCĤPμPrPePsPIP°PSPëPN<sub>2</sub>  
 PjPμC,P°P±PsP»C-P·Pj P·C†PjPsPIP»CĤC° P·PjPμPSC€PμPSPSC† PμC,,PμPeC,C† PrC-C—  
 PeP»PsPiC-PrPsPiCĤPμP»CĤ. PĥP†C,PëPjP°P»CHPSPsPiPs CĤPμP¶PëPjC†  
 PrPsP·C†PIP°PSPSC† PrP»C† P†P°C†C-C°PSC,C-PI P·C- P·PSPëP¶PμPSPëPj  
 PjPμC,P°P±PsP»C-P·PjPsPj PSPμ PIPëP·PSP°C†PμPSPs (PrPëPI. CĤPsP·PrC-P»  
 B«PαP°CĤPjP°PePsPeC-PSPμC,PëPeP°B»).

P>C-PeP°CTĤCTĤPePePN<sub>0</sub> P·P°CTĖ-C-P± P<sub>7</sub>P>PhP'PhPŸP<sub>7</sub> PiCTĤPsC,PëPiPsPeP°P·P°PSPs  
P·P°CTĖC,PsCTĖPsPICrPIP°C,Pë PiP°C†C-C"PSC,P°Pj P· C,CĬIP¶PePsCTĤ PSPëCTĤPePsPIPsCTĤ  
PSPµPrPsCTĖC,P°C,PSC-CTĖC,CTĤ (PrPëPI. CTĤPsP·PrC-P»  
B«P<sub>7</sub>CTĤPsC,PëPiPsPeP°P·P°PSPSCĬB»). PŸPµCTĤP°PiPµPIC,PëC‡PSPëPN<sub>0</sub> PrPsCTĖPIC-Pr  
P·P°CTĖC,PsCTĖCrPIP°PSPSCĬ PePsPjP±C-PSP°C†C-C—  
P°C†PµC,PëP»CTĖP°P»C-C†PëP»PsPIP° PePëCTĖP»PsC,P°/PeP»PsPiC-PrPsPiCTĤPµP»CTĤ  
PiP°C†C-C"PSC,P°Pj P· P»PµPiPePëPj P°P±Ps PiPsPjC-CTĤPSPëPj PiPsCTĖCrC€PµPSPSCĬPj  
C,,CrPSPeC†C-C— PSPëCTĤPsPe PsP±PjPµP¶PµPSPëPN<sub>0</sub> (PrPëPI. CTĤPsP·PrC-P»  
B«PhCTĖPsP±P»PëPIPsCTĖC,C- P·P°CTĖC,PsCTĖCrPIP°PSPSCĬB»). PhC,P¶Pµ, C,P°PePëPj  
PiP°C†C-C"PSC,P°Pj P>C-PeP°CTĤCTĤPePePN<sub>0</sub> P·P°CTĖC-P± P<sub>7</sub>P>PhP'PhPŸP<sub>7</sub> CTĖP>C-Pr  
PiCTĤPëP·PSP°C‡P°C,Pë P· PsP±PµCTĤPµP¶PSC-CTĖC,CTĤ.

$P \rightarrow C - PeP^{\circ}CT_{\bar{C}}C_{\bar{H}}PeP\bar{e}PN_{\bar{e}}$   $P \cdot P^{\circ}C_{\bar{C}}^{\bar{C}} - P \pm$   $P_{\bar{L}}P \rightarrow PhP'P_{\bar{H}}P_{\bar{Y}}P_{\bar{L}}$   $PiCT_{\bar{H}}PsC, P\bar{e}PiPsPeP^{\circ}P \cdot P^{\circ}PSPs$   
 $P \cdot P^{\circ}C_{\bar{C}}^{\bar{C}}, PsC_{\bar{C}}^{\bar{C}}PsPICrPIP^{\circ}C, P\bar{e}$   $PiP^{\circ}C_{\bar{C}}^{\bar{C}} - C''PSC, P^{\circ}Pj$   $P \cdot C, C_{\bar{H}}P_{\bar{H}}PePsC_{\bar{H}}$   
 $PiP_{\bar{C}}C_{\bar{C}} - PSPePsPIPsC_{\bar{H}}$   $PSP_{\bar{H}}PrPsC_{\bar{C}}^{\bar{C}}, P^{\circ}C, PSC - C_{\bar{C}}^{\bar{C}}, C_{\bar{H}}$   $(PrP\bar{e}PI. CT_{\bar{H}}PsP \cdot PrC - P \gg$   
 $B \ll P_{\bar{H}}CT_{\bar{H}}PsC, P\bar{e}PiPsPeP^{\circ}P \cdot P^{\circ}PSPSC_{\bar{H}}B \gg)$ .  $P_{\bar{Y}}P_{\bar{H}}CT_{\bar{H}}P^{\circ}PiP_{\bar{H}}PIC, P\bar{e}C_{\bar{C}}^{\bar{C}}PSP\bar{e}PN_{\bar{e}}$   $PrPsC_{\bar{C}}^{\bar{C}}PIC - Pr$   
 $P \cdot P^{\circ}C_{\bar{C}}^{\bar{C}}, PsC_{\bar{C}}^{\bar{C}}CrPIP^{\circ}PSPSC_{\bar{H}}$   $PiP^{\circ}C_{\bar{C}}^{\bar{C}} - C''PSC, P^{\circ}Pj$   $C - P \cdot P \cdot P^{\circ}C \dots PIPsCT_{\bar{H}}C_{\bar{H}}PIP^{\circ}PSPSC_{\bar{H}}PjP\bar{e}$   
 $PiP_{\bar{C}}C_{\bar{C}} - PSPeP\bar{e}$   $PiPsPjC - CT_{\bar{H}}PSPsC -$   $C, C_{\bar{H}}P_{\bar{H}}PePsC_{\bar{C}}^{\bar{C}}, C - C, P^{\circ}PjPsP_{\bar{H}}P \gg P\bar{e}PIC - C_{\bar{C}}^{\bar{C}}, C_{\bar{H}}$   
 $PIP\bar{e}PSP\bar{e}PePSP_{\bar{H}}PSPSC_{\bar{H}}$   $PiP_{\bar{H}}PjPsCT_{\bar{H}}P^{\circ}PiC - C_{\bar{C}}^{\bar{C}}PSPsPiPs$   $PrC - P^{\circ}C, P_{\bar{H}}P \cdot Cr$   
 $PsP \pm PjP_{\bar{H}}P_{\bar{H}}PSP\bar{e}PN_{\bar{e}}$   $(PrP\bar{e}PI. CT_{\bar{H}}PsP \cdot PrC - P \gg B \ll PhC_{\bar{C}}^{\bar{C}}PsP \pm P \gg P\bar{e}PIPsC_{\bar{C}}^{\bar{C}}, C -$   
 $P \cdot P^{\circ}C_{\bar{C}}^{\bar{C}}, PsC_{\bar{C}}^{\bar{C}}CrPIP^{\circ}PSPSC_{\bar{H}}B \gg)$ .

 $P''C-C, P\ddot{e}.$ 

Р'РµР·РїРµРµР° С,Р° РµС,,РµРµС,РёРІРІС-СГС,Сђ Р·Р°СГС,РѕСГСрРІР°РІР°РІР°СІ  
РёРѕРІРјР±С-СРІР°СГС-С— Р°СГРµС,РёР»»СГР°Р»»С-СГРёР»»РѕРІР°  
РёРёСГР»»РѕС,Р°/РёР»»РѕРІС-РрРѕРІСГРµРµР»»Сђ РрС-С,СІРј (РІС-РёРѕРІ РрРѕ 18 СРёРѕРёС-РІ)  
РІРµ РІСГС,Р°РІРѕРІР»РµРІС-. РёРµ СРёРµРёРѕРІРµРѕРІРІР°СГС"С,СђСГСІ РіСРёРёР·РІР°СГР°С,Рё  
Р»»С-РёР°СГСГСРёРёР° Р·Р°СГС-Р± РёР»Р·РёР·РёР·РёР· СГС-Рі РіСГСРіС-  
РіР°СГС-С"РІС,С-РІ.

$$P\hbar C\uparrow P\mu C,P\ddot{e}P\gg C\acute{I}P^{\circ}P\gg C-C\uparrow P\ddot{e}P\gg P_s P I P^{\circ} P_e P\ddot{e} C\acute{I}P\gg P_s C,P^{\circ}$$

$\text{P}_{\mu}\text{C}\overline{\text{H}}\text{P}_{\text{s}}\text{P}\overline{\text{i}}\text{P}_{\text{s}}\text{P}_{\text{j}}\text{C}-\text{C}\overline{\text{H}}\text{PSCr}\text{C}-\text{PSC}, \text{P}_{\text{s}}\text{P}_{\text{e}}\text{C}\overline{\text{r}}\text{P}\overline{\text{e}}\text{P}_{\text{e}}\text{P}^{\circ}\text{C}\overline{\text{t}}\text{C}-\text{C}\overline{\text{H}}\text{C}\overline{\text{r}}\text{PIC}-\text{PrC}\overline{\text{t}}\text{P}^{\circ}\text{C}, \text{C}\overline{\text{H}}\text{C}, \text{P}^{\circ}\text{P}_{\text{e}}\text{C}-$   
 $\text{C}\overline{\text{r}}\text{P}\overline{\text{e}}\text{P}_{\text{j}}\text{P}\overline{\text{i}}\text{C}, \text{P}_{\text{s}}\text{P}_{\text{j}}\text{P}\overline{\text{e}}: \text{P}\cdot\text{P}^{\circ}\text{P}\overline{\text{i}}\text{P}^{\circ}\text{P}_{\text{j}}\text{P}_{\text{s}}\text{C}\overline{\text{H}}\text{P}_{\text{s}}\text{C}\overline{\text{t}}\text{P}_{\mu}\text{PSPSC}\overline{\text{t}}, \text{P}_{\text{i}}\text{P}_{\text{s}}\text{P}\gg\text{P}_{\text{s}}\text{PIPSP}\overline{\text{e}}\text{P}_{\text{n}}\text{P}\overline{\text{t}}\text{C}-\text{P}\gg\text{C}\overline{\text{H}}, \text{PrP}\cdot\text{PIC}-\text{PS}\text{C}\overline{\text{r}}$   
 $\text{PICrC}\dots\text{P}^{\circ}\text{C}\dots, \text{C}\overline{\text{r}}\text{P}\overline{\text{i}}\text{P}\gg\text{C}\overline{\text{r}}\text{C}, \text{P}^{\circ}\text{PSC}-\text{C}\overline{\text{r}}\text{C}, \text{C}\overline{\text{H}}\text{C}\overline{\text{r}}\text{PIC}-\text{PrP}_{\text{s}}\text{P}_{\text{j}}\text{P}_{\text{s}}\text{C}\overline{\text{r}}\text{C}, \text{C}-\text{C}, \text{P}^{\circ}\text{C}\overline{\text{r}}\text{P}\overline{\text{e}}\text{P}_{\text{j}}\text{P}\overline{\text{i}}\text{C}, \text{P}_{\text{s}}\text{P}_{\text{j}}\text{P}\overline{\text{e}}\text{P}\cdot$   
 $\text{P}\overline{\text{t}}\text{P}_{\text{s}}\text{P}_{\text{e}}\text{C}\overline{\text{r}}\text{P}\overline{\text{e}}\text{P}_{\text{P}}\text{P}_{\text{V}} (\text{PSCrPrPsC}, \text{P}^{\circ}, \text{P}\overline{\text{t}}\text{P}\gg\text{C}\overline{\text{H}}\text{PIP}^{\circ}\text{PSPSC}\overline{\text{t}}\text{C}, \text{P}^{\circ}\text{P}\overline{\text{t}}\text{C}-\text{P}\gg\text{C}\overline{\text{H}}\text{C}\overline{\text{r}}\text{PrC}-\text{P}\gg\text{C}\overline{\text{t}}\text{PSC}\overline{\text{t}}\text{C}-$

PJ C<sub>7</sub>H<sub>7</sub>P<sup>o</sup>·C- P·P<sup>o</sup>C<sub>1</sub>C, PsC<sub>1</sub>C<sub>1</sub>P<sup>o</sup>PSPSC<sub>1</sub> PIPSC<sub>1</sub>C, C<sub>7</sub>H<sub>7</sub>C-C<sub>6</sub>PSCH<sub>7</sub>Ps C, PsPeC<sub>1</sub>P<sub>6</sub>C<sub>1</sub>PSPsC— PrPsP·P<sub>6</sub> PSP<sub>1</sub>PsP<sub>6</sub>±C...C-PrPSP<sup>o</sup> PiPsC<sub>1</sub>P<sub>6</sub>C-C, P<sup>o</sup>P»C-P·P<sup>o</sup>C<sub>1</sub>C-C<sub>1</sub>. PJ C<sub>7</sub>H<sub>7</sub>P<sup>o</sup>·C- PiPsPjC-C<sub>7</sub>H<sub>7</sub>PSPsC— C-PSC, PsPeC<sub>1</sub>P<sub>6</sub>PeP<sup>o</sup>C<sub>1</sub>C— PSP<sub>1</sub>PsP<sub>6</sub>±C...C-PrPSPs PIP<sub>6</sub>PeP»P<sub>6</sub>PeP<sup>o</sup>C, P<sub>6</sub> P±P»C<sub>7</sub>H<sub>7</sub>PIP<sup>o</sup>PSPSC<sub>1</sub>; C<sub>1</sub>PeC%Ps C<sub>1</sub>P<sub>1</sub> PSP<sub>1</sub> PIP<sup>o</sup>P»PsC<sub>1</sub>C<sub>1</sub> P·C<sub>7</sub>H<sub>7</sub>PsP<sub>6</sub>±P<sub>6</sub>C, P<sub>6</sub>, PiPsPeP<sup>o</sup>·P·P<sup>o</sup>PSPs PiC<sub>7</sub>H<sub>7</sub>PsPjP<sub>6</sub>PIP<sup>o</sup>PSPSC<sub>1</sub> C<sub>6</sub>P»C<sub>1</sub>PSPeP<sup>o</sup>. P<sub>1</sub>PsC, C-Pj PiC<sub>7</sub>H<sub>7</sub>P<sub>6</sub>·PSP<sup>o</sup>C<sub>1</sub>P<sup>o</sup>C<sub>7</sub>H<sub>7</sub>C, C<sub>7</sub> P<sup>o</sup>PeC, P<sub>6</sub>PIP<sub>6</sub>PIP<sup>o</sup>PSP<sub>1</sub> PIC<sub>1</sub>PiC-P»P»C<sub>1</sub> (P<sup>o</sup>PrC<sub>1</sub>PsC<sub>7</sub>H<sub>7</sub>±P<sub>1</sub>PSC,) C, P<sup>o</sup> PSP<sup>o</sup>C, C<sub>7</sub>H<sub>7</sub>C-C<sub>7</sub> C<sub>1</sub>C<sub>1</sub>P»C<sub>7</sub>H<sub>7</sub>C,, P<sup>o</sup>C, (PiC<sub>7</sub>H<sub>7</sub>PsPSPsC<sub>1</sub>PSP<sub>6</sub>PeP<sub>6</sub> P·P<sup>o</sup>C<sub>1</sub>C-P±). P<sub>1</sub>PsPeP<sup>o</sup>·P·P<sup>o</sup>PSPs PiC-PrP»C<sub>1</sub>P<sub>1</sub>C<sub>1</sub>PIP<sup>o</sup>PSPSC<sub>1</sub> C<sub>1</sub>P<sub>1</sub>C<sub>1</sub>- (250 PjPjPsP»C<sub>7</sub>H<sub>7</sub> PSP<sup>o</sup>C, C<sub>7</sub>H<sub>7</sub>C-C<sub>7</sub> P±C-PeP<sup>o</sup>C<sub>7</sub>H<sub>7</sub>±PsPSP<sup>o</sup>C, C<sub>1</sub> PiC<sub>7</sub>H<sub>7</sub>PsC, C<sub>1</sub>PiPsPj 3 PiPsPrP<sub>6</sub>PS) P·PePsPSC, C<sub>7</sub>H<sub>7</sub>PsP»P<sub>1</sub>Pj C<sub>7</sub>H<sub>7</sub>P<sub>1</sub> C<sub>1</sub>P<sub>1</sub>C<sub>1</sub>- PJ C<sub>7</sub>H<sub>7</sub>P<sup>o</sup>·C- C, C<sub>1</sub>P<sub>1</sub>P<sub>1</sub>PePsC— C-PSC, PsPeC<sub>1</sub>P<sub>6</sub>PeP<sup>o</sup>C<sub>1</sub>C-C— C<sub>1</sub>P»C-Pr P·P<sup>o</sup>C<sub>1</sub>C, PsC<sub>1</sub>PsPIC<sub>1</sub>PIP<sup>o</sup>C, P<sub>6</sub> PiP<sub>1</sub>PjPsPrC-P<sup>o</sup>P»C-P· P<sub>1</sub>PSC<sub>6</sub>C- PsP·PSP<sup>o</sup>PeP<sub>6</sub> C-PSC, PsPeC<sub>1</sub>P<sub>6</sub>PeP<sup>o</sup>C<sub>1</sub>C— P»C-PeC<sub>7</sub>H<sub>7</sub>C, C<sub>7</sub> C<sub>1</sub>P<sub>6</sub>PjPiC, PsPjP<sup>o</sup>C, P<sub>6</sub>C<sub>1</sub>PSPs.



*PлP»PsPіC-PrPsPiCтPμP»CH*

РμРμCтPμPrPsP·CрPIP°PSPSCи PIPSP°CтP»C-PrPsPe P·P°CтC,PsCтCрPIP°PSPSCи  
PeP»PsPіC-PrPsPiCтPμP»Cт PjPsP¶Pμ PіCтPөP·PIPμCтC,Pe PrPs P·P±C-P»CHC€PμPSPSCи  
C±P°CтCр PeCтPsPIPsC,РμC±C- C,P° CрCтPeP»P°PrPSPμPSCт PeCтPsPIPsC,РμC±. Pj CтP°P·C-  
PIPөPSPөPePSPμPSPSCи PeCтPsPIPsC,РμC±C- CтP»C-Pr PіCтPөP·PSP°C±PөC,Pe  
PIC-PrPіPsPIC-PrPSCр C,РμCтP°PіC-Cт.

PтPSC,PePrPsC, PrP»Cи C,,P°CтPjP°PePsP»PsPіC-C±PSPsC— P°PeC,PePIPsPsCтC,C-  
PeP»PsPіC-PrPsPiCтPμP»Cт PSPμ PIPөCиPIP»PμPSPөP№. PіPeC%Ps PSPμPsP±C...C-PrPSP°  
C€PIPөPrPeP° PePsCтPμPeCтC-Cи C±P°CтCр PeCтPsPIPsC,РμC±C-, CиPePөP№  
P·P±C-P»CHC€PөPICтCи, PіPμCтPμP»PePIP°PSPSCи C,CтPsPjP±PsCтPөC,P°CтPSPsC—  
PjP°CтPө PjPsP¶Pμ P±CрC,Pe PμC,,PμPeC,PePIPsPөPj.

***PμPsP±C-C±PSC- CтPμP°PeCтC-C—.***

*PлPsCтPsC,PePөP№ PsPіPөCт PіCтPsC,,C-P»Cт P±PμP·PіPμPePө*

PтCтC-PSPeP° PіCтPsC,,C-P»Cт P±PμP·PіPμPePө PeP»PsPіC-PrPsPiCтPμP»Cт P±CрP»P°  
PіCтPsPIPμPrPμPSP° Cр P±C-P»CHC€ PSC-P¶ 42000 PіP°CтC-C”PSC,C-PI, CиPeC- P±CтP°P»Pө  
CрC±P°CтC,CH Cр PeP»C-PSC-C±PSPөC... PrPsCтP»C-PrP¶PμPSPSCиC..., Cр C,PsPjCр  
C±PөCтP»C- PіPsPSP°Pr 30000 PіP°CтC-C”PSC,C-PI, CиPeC- PsC,CтPөPjCрPIP°P»Pө  
P»C-PeCрPIP°PSPSCи PeP»PsPіC-PrPsPiCтPμP»PμPj C,P°  
P°CтPμC,PeP»CтP°P»C-CтPөP»PsPIPsCт PePөCтP»PsC,PsCт PsPrPSPsC±P°CтPSPs, C,P°  
PіPsPSP°Pr 9000 PіP°CтC-C”PSC,C-PI, CиPeC- PsC,CтPөPjCрPIP°P»Pө P»C-PeCрPIP°PSPSCи  
PіCтPsC,CиPiPsPj 1 CтPsPeCр P°P±Ps P±C-P»CHC€Pμ. PлP»C-PSC-C±PSPs P·PSP°C±PөPjC-  
PіPsP±C-C±PSC- CтPμP°PeCтC-C—, C%Ps CтPіPsCтC,РμCтC-PіP°P»PөCтCи Cр 4  
PsP±C€PөCтPSPөC... PrPsCтP»C-PrP¶PμPSPSCиC...: PrPsCтP»C-PrP¶PμPSPSCи CAPRIE (Cр  
PrPsCтP»C-PrP¶PμPSPSC- PіPsCтC-PIPsCтPIP°P»Pө P»C-PeCрPIP°PSPSCи  
PeP»PsPіC-PrPsPiCтPμP»PμPj Cр PjPsPSPsC,РμCтP°PіC-C— P·  
P°CтPμC,PeP»CтP°P»C-CтPөP»PsPIPsCт PePөCтP»PsC,PsCт) C,P° PrPsCтP»C-PrP¶PμPSPSCи  
CURE, CLARITY C,P° COMMIT (PrPsCтP»C-PrP¶PμPSPSCи, Cр CиPePөC...  
PіPsCтC-PIPsCтPIP°P»Pө PePsPjP±C-PSPsPIP°PSCр C,РμCтP°PіC-Cт  
PeP»PsPіC-PrPsPiCтPμP»PμPj C,P° P°CтPμC,PeP»CтP°P»C-CтPөP»PsPIPsCт PePөCтP»PsC,PsCт)  
P· PjPsPSPsC,РμCтP°PіC-C”Cт P°CтPμC,PeP»CтP°P»C-CтPөP»PsPIPsCт PePөCтP»PsC,PsCт)  
PSP°PIPμPrPμPSC- PSPөP¶C±Pμ. P—P°PіP°P»PsPj PeP»PsPіC-PrPsPiCтPμP»CH Cр  
PrPsP·CрPIP°PSPSC- 75 PjPi/PrPsP±Cр P±CрPI PіPsPrC-P±PSPөP№ PrPs  
P°CтPμC,PeP»CтP°P»C-CтPөP»PsPIPsC— PePөCтP»PsC,Pe Cр PrPsP·CрPIP°PSPSC- 325  
PjPi/PrPsP±Cр Cр PrPsCтP»C-PrP¶PμPSPSC- CAPRIE PSPμP·P°P»PμP¶PSPs PIC-Pr PIC-PeCр,  
CтC,P°C,C- C,P° CтP°CтPө. PќP° PrPsPrP°C,PsPe PrPs PrPsCтPIC-PrCр, CиPePөP№ P±CрPI  
PSP°PePsPіPөC±PμPSPөP№ Cр PeP»C-PSC-C±PSPөC... PrPsCтP»C-PrP¶PμPSPSCиC..., PjP°P»Pө  
PjC-CтCтPμ CтPіPsPSC,P°PSPSC- PіPsPIC-PrPsPjP»PμPSPSCи PіCтPs PіPsP±C-C±PSC-  
CтPμP°PeCтC-C—.

PлCтPsPIPsC,РμC±P° C” PSP°P№P±C-P»CHC€ PіPsC€PөCтPμPSPsCт PіPsP±C-C±PSPsCт  
CтPμP°PeCтC-C”Cт, PіCтPs CиPeCр PіPsPIC-PrPsPjP»CиP»PsCтCи CиPe PіC-Pr C±P°Cт  
PrPsCтP»C-PrP¶PμPSCт, C,P°Pe C- Cр PіPsCтC,PjP°CтPePμC,PePSPiPsPIPsPjCр  
PіPμCтC-PsPrC-, PI PsCтPSPsPIPsPjCр PіCтPsC,CиPiPsPj PіPμCтC€PsPiPs PjC-CтCиCтCи  
P»C-PeCрPIP°PSPSCи.

$\text{P}_{\mu}\text{C}-\text{Pr}\text{C}\ddagger\text{P}^{\circ}\text{C}\dot{\text{I}}\text{PrPsC}\dot{\text{I}}\text{P}\rangle\text{C}-\text{PrP}\|\text{P}_{\mu}\text{PSPSC}\dot{\text{I}}\text{CAPRIE}$ ,  $\text{C}\dot{\text{r}}\text{P}\ddot{\text{I}}\text{P}^{\circ}\text{C}\dot{\text{I}}\text{C}-\text{C}^{\circ}\text{PSC},\text{C}-\text{PI}$ ,  $\text{C}\dot{\text{I}}\text{P}\text{eC}-\text{PsC},\text{C}\dot{\text{I}}\text{P}\ddot{\text{P}}\text{PjC}\dot{\text{r}}\text{PIP}^{\circ}\text{P}\rangle\text{P}\ddot{\text{e}}\text{P}^{\circ}\text{P}\pm\text{Ps}\text{PeP}\rangle\text{PsPiC}-\text{PrPsPiC}\dot{\text{I}}\text{P}_{\mu}\text{P}\rangle\text{C}\dot{\text{H}}$ ,  $\text{P}^{\circ}\text{P}\pm\text{Ps}\text{P}^{\circ}\text{C}\dot{\text{I}}\text{P}_{\mu}\text{C},\text{P}\ddot{\text{e}}\text{P}\rangle\text{C}\dot{\text{I}}\text{P}^{\circ}\text{P}\rangle\text{C}-\text{C}\dot{\text{I}}\text{P}\ddot{\text{e}}\text{P}\rangle\text{PsPIC}\dot{\text{r}}\text{PeP}\ddot{\text{e}}\text{C}\dot{\text{I}}\text{P}\rangle\text{PsC},\text{C}\dot{\text{r}}$ ,  $\text{P}\cdot\text{P}^{\circ}\text{PiP}^{\circ}\text{P}\rangle\text{C}\dot{\text{H}}\text{PSP}^{\circ}\text{C}\ddagger\text{P}^{\circ}\text{C}\dot{\text{I}}\text{C},\text{PsC},\text{P}^{\circ}\text{PeC}\dot{\text{I}}\text{P}\text{PsPIP}\text{Sc},\text{P}_{\mu}\text{C}\ddagger\text{C}\dot{\text{I}}\text{PeP}\rangle\text{P}^{\circ}\text{P}\rangle\text{P}^{\circ}\text{9,3\%}$ .  $\text{P}\dot{\text{S}}\text{P}^{\circ}\text{C}\dot{\text{I}}\text{C},\text{PsC},\text{P}^{\circ}\text{C},\text{C}\dot{\text{I}}\text{P}\|\text{PeP}\ddot{\text{e}}\text{C}\dots\text{PIP}\ddot{\text{e}}\text{PiP}^{\circ}\text{PrPeC}-\text{PI}\text{P}\pm\text{C}\dot{\text{r}}\text{P}\rangle\text{P}^{\circ}\text{PsPrPSP}^{\circ}\text{PePsPIP}\text{Sc}\dot{\text{I}}\text{C}\dot{\text{r}}\text{C}\dot{\text{I}}\text{P}^{\circ}\text{P}\cdot\text{C}-\text{P}\cdot\text{P}^{\circ}\text{C}\dot{\text{I}}\text{C},\text{PsC}\dot{\text{I}}\text{C}\dot{\text{r}}\text{PIP}^{\circ}\text{PSPSC}\dot{\text{I}}\text{C}\dot{\text{I}}\text{P}\text{ePeP}\rangle\text{PsPiC}-\text{PrPsPiC}\dot{\text{I}}\text{P}_{\mu}\text{P}\rangle\text{C}\dot{\text{H}}$ ,  $\text{C},\text{P}^{\circ}\text{PeC}-\text{P}^{\circ}\text{C}\dot{\text{I}}\text{P}_{\mu}\text{C},\text{P}\ddot{\text{e}}\text{P}\rangle\text{C}\dot{\text{I}}\text{P}^{\circ}\text{P}\rangle\text{C}-\text{C}\dot{\text{I}}\text{P}\ddot{\text{e}}\text{P}\rangle\text{PsPIP}\text{Sc}-\text{PeP}\ddot{\text{e}}\text{C}\dot{\text{I}}\text{P}\rangle\text{PsC},\text{P}\ddot{\text{e}}$ .

PrPs < 1/1000); PrCfP¶Pµ CḡC-PrPePs (< 1/10000), C‡P°CfC,PsC,P° PSPµPIC-PrPsPjP° (PSPµPjPsP¶P»PëPIPs PsC†C-PSPëC,Pë P·P° PSP°C¶PIPSPsCḡ C-PSC,,PsCḡPjP°C†C-C"ḡ). P' CḡP°PjPeP°C... PePsP¶PSPsPiPs PeP»P°CfCḡ CḡPëCfC,PµPj PsCḡPiP°PSC-PI PîPsP±C-C‡PSC-CḡPµP°PeC†C-C— PiCḡPµPrCfC,P°PIP»PµPSC- PI PîPsCḡC¶PrPeCḡ P·PjPµPSC€PµPSPSC¶ CḡPµCḡPNëPsP·PSPScfC,C-.

P— P±PsPeCḡ PeCḡPsPIC- C,P° P»C-PjC,,P°C,PëC‡PSPsC— CḡPëCfC,PµPjPë: PSPµC‡P°CfC,Ps бḡ" C,CḡPsPjP±PsC†PëC,PsPîPµPSC-C¶, P»PµPNëPePsPîPµPSC-C¶, PµPsP·PëPSPsC,,C-P»C-C¶; CḡC-PrPePs бḡ" PSPµPNëC,CḡPsPîPµPSC-C¶, Cḡ C,PsPjCḡ C‡PëCfC»C- C,C¶P¶PeP° PSPµPNëC,CḡPsPîPµPSC-C¶; PrCfP¶Pµ CḡC-PrPePs бḡ" C,CḡPsPjP±PsC,PëC‡PSP° C,CḡPsPjP±PsC†PëC,PsPîPµPSC-C‡PSP° PîCḡCḡPîCḡP° (PÿPÿPµ) (PrPëPI. CḡPsP·PrC-P» B«PḡCfCḡPsP±P»PëPIPsCfC,C- P·P°CfC,PsCfCḡPIP°PSPSC¶B»), P°PîP»P°CfC,PëC‡PSP° P°PSPµPjC-C¶, PîP°PSC†PëC,PsPîPµPSC-C¶, P°PiCḡP°PSCḡP»PsC†PëC,PsP·, C,C¶P¶PeP° C,CḡPsPjP±PsC†PëC,PsPîPµPSC-C¶, PSP°P±CḡC,P° PiPµPjPsC,,C-P»C-C¶ Pḡ, PiCḡP°PSCḡP»PsC†PëC,PsPîPµPSC-C¶, P°PSPµPjC-C¶; C‡P°CfC,PsC,P° PSPµPIC-PrPsPjP° бḡ" PîPsCḡCḡC€PµPSPSC¶ PeC-CfC,PePsPIPs-PjPsP·PePsPIPsPiPs PeCḡPsPIPsC,PIPsCḡPµPSPSC¶\*, P±C-C†PëC,PsPîPµPSC-C¶\*, PiPµPjPsP»C-C,PëC‡PSP° P°PSPµPjC-C¶ Cḡ PîP°C†C-C"PSC,C-PI P· PrPµC,,C-C†PëC,PsPj PiP»CḡPePsP·Ps-6-C,,PsCfC,,P°C,PrPµPiC-PrCḡPsPiPµPSP°P·Pë\* (PrPëPI. CḡPsP·PrC-P» B«PḡCfCḡPsP±P»PëPIPsCfC,C- P·P°CfC,PsCfCḡPIP°PSPSC¶B»).

P— P±PsPeCḡ CḡPµCḡC†PµPIPs-CfCḡPrPëPSPSPsC— CḡPëCfC,PµPjPë: C‡P°CfC,PsC,P° PSPµPIC-PrPsPjP° бḡ" CḡPëPSPḡCḡPsPj PḡPsCḡPSC-CḡP° (PIP°P·PsCfCḡPîP°CfC,PëC‡PSP° P°P»PµCḡPiC-C‡PSP° CfC,PµPSPsPeP°CḡPrC-C¶/P°P»PµCḡPiC-C‡PSPëPNë C-PSC,,P°CḡPeC, PjC-PsPeP°CḡPrP°) PI PePsPSC,PµPeCfC,C- CḡPµP°PeC†C-C— PiC-PîPµCḡC‡CḡC,P»PëPIPsCfC,C- PrPs P°C†PµC,PëP»CḡP°P»C-C†PëP»PsPIPsC— PePëCfC»PsC,Pë\* P°P±Ps PeP»PsPîC-PrPsPiCḡPµP»Cḡ\*\*.

P— P±PsPeCḡ C-PjCḡPSPSPsC— CḡPëCfC,PµPjPë: PrCfP¶Pµ CḡC-PrPePs бḡ" CḡPëCḡPsPIP°C,PePsPIP° C...PIPsCḡPsP±P°, P°PSP°C,,C-P»P°PeC,PsC—PrPSC-CḡPµP°PeC†C-C—, PiPµCḡPµC...CḡPµCḡPSP° PiC-PîPµCḡC‡CḡC,P»PëPIC-CfC,Cḡ PîPsPjC-P¶ C,C-C"PSPsPîC-CḡPëPrPëPSC-PI (C,P°PePëC... C¶Pe C,PëPeP»PsPîC-PrPëPS, PiCḡP°CfCḡPiCḡPµP»Cḡ) (PrPëPI. CḡPsP·PrC-P» B«PḡCfCḡPsP±P»PëPIPsCfC,C- P·P°CfC,PsCfCḡPIP°PSPSC¶B»)\*\*; C‡P°CfC,PsC,P° PSPµPIC-PrPsPjP° бḡ" P°PSP°C,,C-P»P°PeC,PëC‡PSPëPNë C€PsPe\*, PiPsCḡPëP»PµPSPSC¶ P°P»PµCḡPiC-C‡PSPëC... CḡPëPjPîC,PsPjC-PI C...P°CḡC‡PsPIPsC— P°P»PµCḡPiC-C—\*, C-PSCḡCḡP»C-PSPsPIPëPNë P°CḡC,PsC-PjCḡPSPSPëPNë CḡPëPSPḡCḡPsPj, C%Ps PjPsP¶Pµ PiCḡPëP·PIPµCfC,Pë PrPs C,C¶P¶PePsC— PiC-PîPsPiP»C-PePµPjC-C—, PsCḡPsP±P»PëPIPs Cḡ PîP°C†C-C"PSC,C-PI C-P· PîC-PrC,PëPiPsPj P°PSC,PëPiPµPSCḡ P»PµPNëPePsC†PëC,C-PI P»CḡPrPëPSPë DRA4 (C‡P°CfC,C-C€Pµ Cḡ C¶PiPsPSC†C-PI)\*\*.

P— P±PsPeCḡ PjPµC,P°P±PsP»C-P·PjCḡ C,P° PsP±PjC-PSCḡ CḡPµC‡PsPIPëPS: C‡P°CfC,PsC,P° PSPµPIC-PrPsPjP° бḡ" PiC-PîPsPiP»C-PePµPjC-C¶\*, PîPsPrP°PiCḡP°\* (PrPëPI. CḡPsP·PrC-P» B«PḡCfCḡPsP±P»PëPIPsCfC,C- P·P°CfC,PsCfCḡPIP°PSPSC¶B»).

P— P±PsPeCḡ PiCḡPëC...C-PePë: PrCfP¶Pµ CḡC-PrPePs бḡ" PiP°P»CḡC†PëPSP°C†C-C—, CḡPiP»CḡC,P°PSC-CfC,Cḡ CḡPIC-PrPsPjPsCfC,C-.

P— P±PsPeCḡ PSPµCḡPIPsPIPsC— CḡPëCfC,PµPjPë: PSPµC‡P°CfC,Ps бḡ"

PIPSCrC,C7C-C€PSCbPsC#PmC7PmPiPSC- PeC7PsPIPsC,PmC#C- (P·P°  
PiPsPIC-PrPsPjP»PmPSPSClPjPë PrPmClPeC- PIPëPiP°PrPePë P±CrP»Pë P»PmC,P°P»CHbPSC-),  
PiPsP»PsPIPsPëPNë P±C-P»CHb, PiP°C7PmC7C,PmP·C-Cl, P·P°PiP°PjPsC7PsC#PmPSPSCl;  
PrCrP¶Pm C7C-PrPePs b7" PiPsC7CrC€PmPSPSCl ClPjP°PePsPIPëC... PIC-PrC#CrC,C,C-PI,  
P°PiPmPIP·C-Cl.

*P— P±PsPeCž PsC7PiP°PSC-PI P·PsC7Cž: PSPmC#P°C7C,Ps b7" PsC#PSC-  
PeC7PsPIPsPIPëP»PëPIPë (PePsPS'CHbPeC,PëPIP°P»CHbPSC-, PsPeCrP»ClC7PSC-,  
C7PmC,PëPSP°P»CHbPSC-).*

*P— P±PsPeCž PsC7PiP°PSC-PI ClP»CžC...Cž: C7C-PrPePs b7" PIPmC7C,PëPiPs, C#P°C7C,PsC,P°  
PSPmPIC-PrPsPjP° b7" PIC,C7P°C,P° ClP»CrC...Cr\*, PrP·PIC-PS Cr PICrC...P°C...\*.*

*P— P±PsPeCž ClCžPrPëPS: C#P°C7C,Ps b7" PiPmPjP°C,PsPjPë, PrCrP¶Pm C7C-PrPePs b7"  
ClPmC7PNëPsP·PSC- PeC7PsPIPsPIPëP»PëPIPë, PeC7PsPIPsC,PmC#C- P·  
PsPiPmC7P°C#C-PNëPSPsC— C7P°PSPë, PIP°ClPeCrP»C-C,,; PrCrP¶Pm C7C-PrPePs b7"  
PiC-PiPsC,PmPSP·C-Cl; C#P°C7C,PsC,P° PSPmPIC-PrPsPjP° b7" PiCrC7PiCrC7P°  
PëPmPSP»PmPNëPSP°b7"P°PmPSPsC...P°\*.*

*P— P±PsPeCž C7PmClPiC-C7P°C,PsC7PSPsC— ClPëClC,PmPjPë, PsC7PiP°PSC-PI  
PiC7CžPrPSPsC— PeP»C-C,PePë C,P° ClPmC7PmPrPsClC,C-PSPSCl: C#P°C7C,Ps b7"  
PSPsClPsPIP° PeC7PsPIPsC,PmC#P°; PrCrP¶Pm C7C-PrPePs b7" PeC7PsPIPsC,PmC#C- P·  
PrPëC...P°P»CHbPSPsPiPs C,C7P°PeC,Cr (PeC7PsPIPsC...P°C7PeP°PSPSCl,  
P»PmPiPmPSPmPIP° PeC7PsPIPsC,PmC#P°), P±C7PsPSC...PsClPiP°P·Pj,  
C-PSC,PmC7C7C,PëC#C-P°P»CHbPSPëPNë PiPSPmPIPjPsPSC-C,,  
PmPsP·PëPSPsC,,C-P»CHbPSP° PiPSPmPIPjPsPSC-Cl; C#P°C7C,PsC,P° PSPmPIC-PrPsPjP°  
b7" PSPmPeP°C7PrC-PsPiPmPSPSPëPNë PSP°P±C7ClPe P»PmPiPmPSCb PiC7Pë  
C,C7PëPIP°P»PsPjCr P·P°C7C,PsClCrPIP°PSPSC- PiC7PmPiP°C7P°C,Cr C,P° Cr  
C7P°PjPeP°C... PiC-PiPmC7C#CrC,P»PëPIPsClC,C- PSP°  
P°C#PmC,PëP»ClP°P»C-C#PëP»PsPICr PePëClP»PsC,Cr\*.*

*P— P±PsPeCž C€P»CžPSPePsPIPs-PePëC€PePsPIPsPiPs C,C7P°PeC,Cž: C#P°C7C,Ps b7"  
C€P»CrPSPePsPIPs-PePëC€PePsPIC- PeC7PsPIPsC,PmC#C-, PrC-P°C7PmCl, P±C-P»CHb  
Cr P¶PëPIPsC,C-, PrPëClPiPmPiClC-Cl; PSPmC#P°C7C,Ps b7" PIPëC7P°P·PeP°  
C€P»CrPSPeCr C,P° PrPIP°PSP°PrC#ClC,PëPiP°P»PsC— PePëC€PePë, PiP°C7C,C7PëC,,  
P±P»C7PiP°PSPSCl, PSCrPrPsC,P°, P·P°PiPsC7, P·PrCrC,C,Cl P¶PëPIPsC,P°;  
C7C-PrPePs b7" C7PmC,C7PsPiPmC7PëC,PsPSC-P°P»CHbPSC- PeC7PsPIPsC,PmC#C-;  
PrCrP¶Pm C7C-PrPePs b7" C€P»CrPSPePsPIPs-PePëC€PePsPIC- C,P°  
C7PmC,C7PsPiPmC7PëC,PsPSC-P°P»CHbPSC- PeC7PsPIPsC,PmC#C- P·  
P»PmC,P°P»CHbPSPëPj PSP°ClP»C-PrPePsPj, PiP°PSPeC7PmP°C,PëC,, PePsP»C-C, (Cr  
C,PsPjCr C#PëClP»C- PIPëC7P°P·PePsPIPëPNë P°P±Ps P»C-PjC,,PsC#PëC,P°C7PSPëPNë),  
ClC,PsPjP°C,PëC,,; C#P°C7C,PsC,P° PSPmPIC-PrPsPjP° b7" C7PsP·P»P°PrPë P· P±PsPeCr  
PIPmC7C...PSC-C... PIC-PrPrC-P»C-PI PëP¶Pÿ (PmP·PsC,,P°PiC-C,, PIPëC7P°P·PeP°  
ClC,C7P°PIPsC...PsPrCr, PiPmC7C,,PsC7P°C#C-Cl, PmC7PsP·PëPIPsPëPNë  
PiP°C7C,C7PëC,, PmC7PsP·PëPIPsPëPNë PrCrPsPrPmPSC-C,,  
PiP°C7C,C7PsPrCrPsPrPmPSP°P»CHbPSP° PIPëC7P°P·PeP°/PiPmC7C,,PsC7P°C#C-Cl)\*,  
C7PsP·P»P°PrPë P· P±PsPeCr PSPëP¶PSC-C... PIC-PrPrC-P»C-PI PëP¶Pÿ  
(PIPëC7P°P·PeP° C,PsPSPePsPiPs PePëC€PeC-PIPsPëPeP° (C,PsPSPePsC— PePëC€PePë  
C,P° PeP»CrP±PsPIPsC— PePëC€PePë) C- C,PsPICrC,PsPiPs PePëC€PeC-PIPsPëPeP°*

(PsP±PsPrPsPIPsC— PePëC€PePë C,P° PíCĤCĹPjPsC— PePëC€PePë), PePsP»C-C, C-  
PíPµCĤC,,PsCĤP°C†C-CĹ PePëC€PeC-PIPSPëPeP°)\*, CĬPëPjPíC,PsPjPë P· P±PsPeCř  
PIPµCĤC...PSC-C... PIC-PrPrC-P»C-PI PĚPљPŸ\*, C,P°PeC- CĹPe, P±C-P»CH Cř  
C€P»CřPSPeCř (PrPëPI. CĤPsP·PrC-P» B«PĥCĬPsP±P»PëPIPsCĬC,C-  
P·P°CĬC,PsCĬCřPIP°PSPSCĹB»), PíPsPIBĤ™ CĹP·P°PSC- C-P·  
P·P°CĬC,PsCĬCřPIP°PSPSCĹPj P°C†PµC,PëP»CĬP°P»C-C†PëP»PsPIPsC— PePëCĬP»PsC,Pë  
C€P»CřPSPePsPIPs-PePëC€PePsPIC- CĤPµP°PeC†C-C— PjPsP¶CřC,CH  
CĬCřPíCĤPsPIPsPrP¶CřPIP°C,PëCĬCĹ (P°P±Ps PSC-) PeCĤPsPIPsC,PµC†PµCĤ C-  
PjPsP¶CřC,CH PIPëPSPëPeP°C,Pë PSP° C,,PsPSC- P·P°CĬC,PsCĬCřPIP°PSPSCĹ  
P±CřPrCH-CĹPePsC— PrPsP·Pë P°C†PµC,PëP»CĬP°P»C-C†PëP»PsPIPsC—  
PePëCĬP»PsC,Pë C- Cř PíP°C†C-C”PSC,C-PI P· PSP°CĹPIPS-CĬC,CH P°P±Ps  
PIC-PrCĬCřC,PSC-CĬC,CH PíPsPíPµCĤPµPrP¶CřPIP°P»CHPSPsC—  
CĬPëPjPíC,PsPjP°C,PëPePë C†Pë CĬPµCĤPNµPsP·PSPëC... C€P»CřPSPePsPIPs-  
PePëC€PePsPIPëC... PíPsPrC-PNµ PI P°PSP°PjPSPµP·C-\*, PíPsCĬC,CĤPëPNµ  
PíP°PSPeCĤPµP°C,PëC, PI CĤP°PjPeP°C... CĤPµP°PeC†C-C—  
PiC-PíPµCĤC†CřC,P»PëPIPsCĬC,C- PSP° P°C†PµC,PëP»CĬP°P»C-C†PëP»PsPICř  
PePëCĬP»PsC,Cř\*.

*P— P±PsPeCž PiPµPíP°C,PsP±C-P»C-P°CĤPSPsC— CĬPëCĬC,PµPjPë: PrCřP¶Pµ CĤC-PrPePs BĤ“*  
*PíPsCĬC,CĤP° PíPµC†C-PSPePsPIP° PSPµPrPsCĬC,P°C,PSC-CĬC,CH, PíPµPíP°C,PëC,,*  
*PIC-PrC...PëP»PµPSPSCĹ PIC-Pr PSPsCĤPjPë P· P±PsPeCř PíPsPeP°P·PSPëPeC-PI*  
*C,,CřPSPeC†C-C— PíPµC†C-PSPePë; C†P°CĬC,PsC,P° PSPµPIC-PrPsPjP° BĤ“ CřCĤP°P¶PµPSPSCĹ*  
*PíPµC†C-PSPePë, PíPµCĤPµPIP°P¶PSPs PíPµPíP°C,PsC†PµP»CHP»CĹCĤPSPµ\*,*  
*PíC-PrPIPëC%µPµPSPSCĹ CĤC-PIPS-C-PI PíPµC†C-PSPePsPIPëC... C,,PµCĤPjPµPSC,C-PI\*,*  
*C...CĤPsPSC-C†PSPëPNµ PíPµPíP°C,PëC,\*.*

*P— P±PsPeCž C€PeC-CĤPë C,P° PíC-PrC€PeC-CĤPSPsC— PeP»C-C,PePsPIPëPSPë: C†P°CĬC,Ps*  
*BĤ“ PíPsCĹPIP° CĬPëPSC†C-PI, PSPµC†P°CĬC,Ps BĤ“ PIPëCĬPëPíP°PSPSCĹ,*  
*CĬPIPµCĤP±C-P¶, PeCĤPsPIPsPIPëP»PëPIPë Cř C€PeC-CĤCř (PíCřCĤPíCřCĤP°);*  
*PrCřP¶Pµ CĤC-PrPePs BĤ“ P±CřP»CHPsP·PSPëPNµ PrPµCĤPjP°C,PëC,*  
*(C,PsPeCĬPëC†PSPëPNµ PµPíC-PrPµCĤPjP°P»CHPSPëPNµ PSPµPeCĤPsP»C-P·,*  
*CĬPëPSPrCĤPsPj PŸC,C-PIPµPSCĬP°BĤ“P”P¶PsPSCĬPsPSP°,*  
*PjCřP»CHC,PëC,,PsCĤPjPSP° PµCĤPëC,PµPjP°), PíPsCĬC,CĤPëPNµ*  
*PíPµPSPµCĤP°P»C-P·PsPIP°PSPëPNµ PµPeP·P°PSC,PµPjP°C,PsP·PSPëPNµ*  
*PíCřCĬC,CřP»CHPsP·, P°PSPiC-PsPSPµPICĤPsC,PëC†PSPëPNµ PSP°P±CĤCĹPe,*  
*PjPµPrPëPeP°PjPµPSC,PsP·PSPëPNµ CĬPëPSPrCĤPsPj PiC-PíPµCĤC†CřC,P»PëPIPsCĬC,C-,*  
*PjPµPrPëPeP°PjPµPSC,PsP·PSPµ PIPëCĬPëPíP°PSPSCĹ P· PµPsP·PëPSPsC,,C-P»C-C”CH*  
*C,P° CĬPëCĬC,PµPjPSPsCH CĬPëPjPíC,PsPjP°C,PëPePsCH (DRESS-CĬPëPSPrCĤPsPj),*  
*PµCĤPëC,PµPjP°C,PsP·PSPµ C†Pë PµPeCĬC,,PsP»C-P°C,PëPIPSµ PIPëCĬPëPíP°PSPSCĹ,*  
*PeCĤPsPíPëPIBĤ™ CĹPSPeP°, PµPeP·PµPjP°, C†PµCĤPIPsPSPëPNµ PíP»P°CĬPePëPNµ*  
*P»PëC€P°PNµ; C†P°CĬC,PsC,P° PSPµPIC-PrPsPjP° BĤ“ C,,C-PeCĬPsPIP°PSP°*  
*PµCĤPëC,PµPjP°\*.*

*P— P±PsPeCž PeC-CĬC,PePsPIPs-Pj’CĹP·PsPIPsC— CĬPëCĬC,PµPjPë: PrCřP¶Pµ CĤC-PrPePs BĤ“*  
*PeC-CĬC,PePsPIPs-Pj’CĹP·PsPIC- PeCĤPsPIPsPIPëP»PëPIPë (PíPµPjP°CĤC,CĤPsP·),*  
*P°CĤC,CĤPëC,, P°CĤC,CĤP°P»PiC-CĹ, PjC-P°P»PiC-CĹ.*

*P— P±PsPeCž PSPëCĤPsPe C,P° CĬPµC†PsPIPëPrC-P»CHPSPsC— CĬPëCĬC,PµPjPë:*  
*PSPµC†P°CĬC,Ps BĤ“ PíPµPjP°C,CřCĤC-CĹ; PrCřP¶Pµ CĤC-PrPePs BĤ“*

PiP»PsPjPμCḡCfP»PsPSPμC,,CḡPëC,, PïC-PrPIPëC%PμPSPSCḡ CḡC-PIPSCḡ  
PeCḡPμP°C,PëPSC-PSCr PI PeCḡPsPIC-; C‡P°CḡC,PsC,P° PSPμPIC-PrPsPjP° Bḡ“ PSPëCḡPePsPIP°  
PSPμPrPsCḡC,P°C,PSC-CḡC,CH\*, PiPsCḡC,CḡP° PSPëCḡPePsPIP°  
PSPμPrPsCḡC,P°C,PSC-CḡC,CH (PsCḡPsP±P»PëPIPs Cr PïP°C†C-C”PSC,C-PI P·  
PSPëCḡPePsPIPsCḡ PSPμPrPsCḡC,P°C,PSC-CḡC,Cḡ, CḡPμCḡC†PμPIPsCḡ  
PrPμPePsPjPïPμPSCḡP°C†C-C”Cḡ, PSPμC,,CḡPsC,PëC‡PSPëPj CḡPëPSPrCḡPsPjPsPj P°P±Ps  
PsPrPSPSc‡P°CḡPSPëPj P·P°CḡC,PsCḡCrPIP°PSPSCḡPj PrC-CḡCḡPμC,PëPeC-PI)\*.

P—P°PiP°P»CHPSC- CḡPsP·P»P°PrPë C,P° PïPsCḡC‡C€PμPSPSCḡ C‡ PjC-CḡC†C-  
PIPIPμPrPμPSPSCḡ: C‡P°CḡC,Ps Bḡ“ PeCḡPsPIPsC,PμC‡P° PI PjC-CḡC†C-  
PïCḡPsPePsP»CḡPIP°PSPSCḡ; PrCrP¶Pμ CḡC-PrPePs Bḡ“ P»PëC...PsPjP°PSPeP°;  
C‡P°CḡC,PsC,P° PSPμPIC-PrPsPjP° Bḡ“ PSP°P±CḡCḡPePë\*.

P>P°P±PsCḡP°C,PsCḡPSC- PïPsPeP°P·PSPëPePë: PSPμC‡P°CḡC,Ps Bḡ“ P·P±C-P»CHC€PμPSPSCḡ  
C‡P°CḡCr PeCḡPsPIPsC,PμC‡C-, P·PSPëP¶PμPSPSCḡ PeC-P»CHPePsCḡC,C-  
PSPμPNëC,CḡPsC,,C-P»C-PI, P·PSPëP¶PμPSPSCḡ PeC-P»CHPePsCḡC,C-  
C,CḡPsPjP±PsC†PëC,C-PI.

P— P±PsPeC‡ CḡPμPïCḡPsPrC‡PeC,PëPIPSPSc— CḡPëCḡC,PμPjPë: CḡC-PrPePs Bḡ“  
PiC-PSPμPePsPjP°CḡC,C-Cḡ.

\* B«P§P°CḡC,PsC,P° PSPμPIC-PrPsPjP°B» PIC-PrPïPsPIC-PrP°C” C-PSC,,PsCḡPjP°C†C-C—,  
PSP°PIPμPrPμPSC-PNë PI PsPïCrP±P»C-PePsPIP°PSPëC... PrP°PSPëC... C%PμPsPrPs PḡPḡPḡ.

\*\* P†PSC,,PsCḡPjP°C†C-Cḡ CḡC,PsCḡPsPIPsPs PeP»PsPïC-PrPsPiCḡPμP»Cḡ P·  
C‡P°CḡC,PsC,PsCḡ B«C‡P°CḡC,PsC,P° PSPμPIC-PrPsPjP°B».

-

PμPsPIC-PrPsPjP»PμPSPSCḡ PïCḡPs PïPsP±C-C‡PSC- CḡPμP°PeC†C-C— PïC-CḡP»Cḡ  
CḡPμC”CḡC,CḡP°C†C-C— P»C-PeP°CḡCḡCHPePsPiPs P·P°CḡPsP±Cr PjP°C” PIP°P¶P»PëPIPμ  
P·PSP°C‡PμPSPSCḡ. P¶Pμ PrP°C” P·PjPsPiCr PïCḡPsPIPsPrPëC,Pë PjPsPSC-C,PsCḡPëPSPi  
CḡPïC-PIPIC-PrPSPSc€PμPSPSCḡ PePsCḡPëCḡC,CH/CḡPëP·PëPe PïCḡPë  
P·P°CḡC,PsCḡCrPIP°PSPSC- C†CHPsPiPs P»C-PeP°CḡCḡCHPePsPiPs P·P°CḡPsP±Cr.  
PḡPμPrPëC‡PSPëPj C,P° C,,P°CḡPjP°C†PμPIC,PëC‡PSPëPj PïCḡP°C†C-PIPSPëPeP°Pj, P°  
C,P°PePsP¶ PïP°C†C-C”PSC,P°Pj P°P±Ps C—C... P·P°PePsPSPSPëPj  
PïCḡPμPrCḡC,P°PIPSPëPeP°Pj CḡP»C-Pr PïPsPIC-PrPsPjP»CḡC,Pë PïCḡPs CrCḡC-  
PIPëPïP°PrPePë PïC-PrPsP·CḡCḡPIP°PSPëC... PïPsP±C-C‡PSPëC... CḡPμP°PeC†C-PNë C,P°  
PIC-PrCḡCrC,PSPsCḡC,C- PμC,,PμPeC,PëPIPSPsCḡC,C- P»C-PeP°CḡCḡCHPePsPiPs  
P·P°CḡPsP±Cr C‡PμCḡPμP· PḡPIC,PsPjP°C,PëP·PsPIP°PSCr C-PSC,,PsCḡPjP°C†C-PNëPSCr  
CḡPëCḡC,PμPjCr P· C,,P°CḡPjP°PePsPSP°PiP»CḡPrCr P·P° PïPsCḡPëP»P°PSPSCḡPj:  
<https://aisf.dec.gov.ua/>.

PμPsPIC-PrPsPjPëC,Pë PïCḡPs PSPμP±P°P¶P°PSPμ CḡPIPëC%Pμ PïCḡPë  
P·P°CḡC,PsCḡCrPIP°PSPSC- P»C-PeP°CḡCḡCHPePsPiPs P·P°CḡPsP±Cr PjPsP¶PSP° P·P°  
C,PμP»PμC,,PsPSPsPj 38(050) 309-83-54 (C†C-P»PsPrPsP±PsPIPs).

**PḡPμCḡPjC-PS PïCḡPëPrP°C,PSPsCḡC,C-.**

2 C<sub>7</sub>PsPePë.

### **PJPjPsPIPë P·P±P<sub>μ</sub>C<sub>7</sub>C-PiP°PSPSC<sub>II</sub>.**

P—P±P<sub>μ</sub>C<sub>7</sub>C-PiP°C,Pë P<sub>i</sub>C<sub>7</sub>Pë C,P<sub>μ</sub>PjP<sub>i</sub>P<sub>μ</sub>C<sub>7</sub>P°C,C<sub>7</sub>C<sub>7</sub>C- PSP<sub>μ</sub> PIPëC‰P<sub>μ</sub> 25 B°P<sub>Y</sub> PI  
PsC<sub>7</sub>PëPiC-PSP°P»CH<sub>2</sub>PSC-PN<sub>2</sub> C<sub>7</sub>PiP°PePsPIC†C-.

P—P±P<sub>μ</sub>C<sub>7</sub>C-PiP°C,Pë C<sub>7</sub> PSP<sub>μ</sub>PrPsC<sub>7</sub>C,C<sub>7</sub>PiPSPsPjC<sub>7</sub> PrP»C<sub>II</sub> PrC-C,P<sub>μ</sub>PN<sub>2</sub> PjC-C<sub>7</sub>C†C-.

### **PJPiP°PePsPIPeP°.**

P<sub>μ</sub>Ps 7 PeP°PiC<sub>7</sub>C<sub>7</sub>P» C<sub>7</sub> P±P»C-C<sub>7</sub>C,P<sub>μ</sub>C<sub>7</sub>C-, PiPs 4 P±P»C-C<sub>7</sub>C,P<sub>μ</sub>C<sub>7</sub>Pë C<sub>7</sub> PiP°C†C†C- P·  
PeP°C<sub>7</sub>C,PsPSC<sub>7</sub>.

P<sub>h</sub>P±Ps PiPs 7 PeP°PiC<sub>7</sub>C<sub>7</sub>P» C<sub>7</sub> P±P»C-C<sub>7</sub>C,P<sub>μ</sub>C<sub>7</sub>C-, PiPs 8 P±P»C-C<sub>7</sub>C,P<sub>μ</sub>C<sub>7</sub>C-PI C<sub>7</sub> PiP°C†C†C-  
P· PeP°C<sub>7</sub>C,PsPSC<sub>7</sub>.

P<sub>h</sub>P±Ps PiPs 28 PeP°PiC<sub>7</sub>C<sub>7</sub>P» C<sub>7</sub> P±P°PSC†C-, PiPs 1 P±P°PSC†C- C<sub>7</sub> PiP°C†C†C- P·  
PeP°C<sub>7</sub>C,PsPSC<sub>7</sub>.

### **P<sub>h</sub>P°C,P<sub>μ</sub>PiPsC<sub>7</sub>C-C<sub>II</sub> PIC-PrPiC<sub>7</sub>C<sub>7</sub>PeC<sub>7</sub>.**

P—P° C<sub>7</sub>P<sub>μ</sub>C†P<sub>μ</sub>PiC,PsPj.

### **P'PëC<sub>7</sub>PsP±PSPëPe.**

P<sub>Y</sub>PhP' P<sub>K</sub>P'P<sub>α</sub> B«P<sub>h</sub>P†P<sub>h</sub>P P<sub>h</sub>P<sub>i</sub>P†P<sub>h</sub>B» (PIC-PrPiPsPIC-PrP°P»CH<sub>2</sub>PSPëPN<sub>2</sub> P·P° PIPëPiC<sub>7</sub>C<sub>7</sub>Pe  
C<sub>7</sub>P<sub>μ</sub>C<sub>7</sub>C-C—, PSP<sub>μ</sub> PIPeP»C<sub>7</sub>C†P°C<sub>7</sub>C†Pë PePsPSC,C<sub>7</sub>PsP»CH<sub>2</sub>/PIPëPiC<sub>7</sub>PsP±C<sub>7</sub>PIP°PSPSC<sub>II</sub>  
C<sub>7</sub>P<sub>μ</sub>C<sub>7</sub>C-C—).

P<sub>h</sub>P<sub>Y</sub> B«P<sub>α</sub>P°C<sub>7</sub>PjP°PeB» (PIC-PrPiPsPIC-PrP°P»CH<sub>2</sub>PSPëPN<sub>2</sub> P·P° PIPëC<sub>7</sub>PsP±PSPëC†C,PIPs C,P°  
PePsPSC,C<sub>7</sub>PsP»CH<sub>2</sub>/PIPëPiC<sub>7</sub>PsP±C<sub>7</sub>PIP°PSPSC<sub>II</sub> C<sub>7</sub>P<sub>μ</sub>C<sub>7</sub>C-C—, PSP<sub>μ</sub> PIPeP»C<sub>7</sub>C†P°C<sub>7</sub>C†Pë  
PIPëPiC<sub>7</sub>C<sub>7</sub>Pe C<sub>7</sub>P<sub>μ</sub>C<sub>7</sub>C-C—).

### **P<sub>h</sub>C-C<sub>7</sub>C†P<sub>μ</sub>P·PSP°C...PsPrP¶P<sub>μ</sub>PSPSC<sub>II</sub> PIPëC<sub>7</sub>PsP±PSPëPeP° C,P° P°PrC<sub>7</sub>P<sub>μ</sub>C<sub>7</sub>P° PjC-C<sub>7</sub>C†C<sub>II</sub> PiC<sub>7</sub>PsPIP°PrP¶P<sub>μ</sub>PSPSC<sub>II</sub> PN<sub>2</sub>PsPiPs PrC-C<sub>II</sub>P»CH<sub>2</sub>PSPsC<sub>7</sub>C,C-.**

PJPeC<sub>7</sub>P°C—PSP°, 01013, Pj. P<sub>h</sub>PëC—PI, PIC<sub>7</sub>P». P'C<sub>7</sub>PrC-PSP<sub>7</sub>C<sub>7</sub>C<sub>7</sub>C,C<sub>7</sub>C-C—, 5.

PJPeC<sub>7</sub>P°C—PSP°, 04080, Pj. P<sub>h</sub>PëC—PI, PIC<sub>7</sub>P». P<sub>h</sub>PëC<sub>7</sub>PëP»C-PIC<sub>7</sub>CH<sub>2</sub>PeP°, 74.