

$$\begin{array}{c} \text{PrP} \gg \text{C}\Pi \text{ PjP}_{\mu}\text{PrP}\ddot{\text{e}}\text{C}\ddagger\text{PSPsPiPs} \text{ P}\cdot\text{P}^{\circ}\text{C}\acute{\text{I}}\text{C}, \text{PsC}\acute{\text{I}}\text{C}\acute{\text{r}}\text{PIP}^{\circ}\text{PSPSC}\Pi \text{ P} \gg \text{C}-\text{PeP}^{\circ}\text{C}\ddot{\text{I}}\text{C}\ddot{\text{H}}\text{PePsPiPs} \\ \text{P}\cdot\text{P}^{\circ}\text{C}\acute{\text{I}}\text{PsP}\pm\text{C}\acute{\text{r}} \end{array}$$

(Nootropil^{B®})

$$\begin{aligned} & \text{P}\ddot{\text{U}}\text{C}-\text{C}\ddot{\text{H}}\text{P}^{\circ}\text{C}\ddagger\text{P}\ddot{\text{U}}\text{C}, \text{P}^{\circ}\text{P}\ddot{\text{J}} \text{C}'' \text{PSPsPsC}, \text{C}\ddot{\text{H}}\text{PsP}\ddot{\text{I}}\text{PSP}\ddot{\text{P}}\ddot{\text{J}} \text{P}\cdot\text{P}^{\circ}\text{C}\ddagger\text{PsP}\pm\text{PsP}\ddot{\text{J}}, \text{C}, \text{PsP}\pm\text{C}, \text{Ps} \\ & \text{P}\ddot{\text{I}}\text{C}\ddagger\text{P}\ddot{\text{E}}\text{C}\dots\text{PsC}, \text{C}\ddot{\text{H}}\text{PsP}\ddot{\text{I}}\text{PSP}\ddot{\text{P}}\ddot{\text{J}} \text{P}\ddot{\text{I}}\text{C}\ddot{\text{H}}\text{P}\ddot{\text{U}}\text{P}\ddot{\text{I}}\text{P}^{\circ}\text{C}\ddot{\text{H}}\text{P}^{\circ}\text{C}, \text{PsP}\ddot{\text{J}}, \text{C}\%_{\text{O}}\text{Ps} \text{P}\pm\text{P}\ddot{\text{U}}\text{P}\cdot\text{P}\ddot{\text{I}}\text{PsC}\ddagger\text{P}\ddot{\text{U}}\text{C}\ddot{\text{H}}\text{P}\ddot{\text{U}}\text{P}\ddot{\text{r}}\text{PSC}\ddot{\text{H}}\text{Ps} \end{aligned}$$

PjPμPjP±CḡP°PSPë, CḡPeC- PIPëPePsCḡPëCḡC,PsPICḡCḡC,CHCḡCḡ PīCḡPë
PiPμPjPsPrC-P°P»C-P·C-. PḡC-CḡP°CḡPμC,P°Pj PSP°PePsPīPëCḡCḡC”C,CHCḡCḡ PI
C,PeP°PSPëPSP°C... PePsCḡPë PiPsP»PsPIPSPsPiPs PjPsP·PeCḡ, PīPμCḡPμPIP°PḡPSPs PI
P»PsP±PSPëC..., C,C-Pjḡḡ™ CḡPSPëC... C,P° PīPsC,PëP»PëCḡPSPëC... P·PsPSP°C...,
PjPsP·PsCḡPeCḡ C- P±P°P·P°P»CHPSPëC... PiP°PSPiP»C-CḡC....

P’C-PsC,CḡP°PSCḡC,,PsCḡPjP°CḡC-Cḡ

PḡC-CḡP°CḡPμC,P°Pj C” P°PeC,PëPIPSPëPj Cḡ PSPμP·PjC-PSPμPSPsPjCḡ PIPëPiP»CḡPrC- C,P°
PSPμ PjPμC,P°P±PsP»C-P·CḡC”C,CHCḡCḡ Cḡ C,PIP°CḡPëPS.

P’PëPIPμPrPμPSPSCḡ

PḡPμCḡC-PsPr PSP°PīC-PIPIPëPIPμPrPμPSPSCḡ PīCḡPμPīP°CḡP°C,Cḡ P· PeCḡPsPIC-
CḡC,P°PSPsPIPëC,CH 4ḡḡ”5 PiPsPrPëPS C- 6ḡḡ”8 PiPsPrPëPS ḡḡ” P·C-
CḡPīPëPSPSPsPjPsP·PePsPIPsC— CḡC-PrPëPSPë. PīPμPNḡ PīPμCḡC-PsPr PjPsPḡPμ
PīPsPrPsPIPḡCḡPIP°C,PëCḡCḡ PīCḡPë PSPëCḡPePsPIC-PNḡ PSPμPrPsCḡC,P°C,PSPsCḡC,C-.
PḡC-CḡP°CḡPμC,P°Pj PIPëPIPsPrPëC,CHCḡCḡ PSPëCḡPeP°PjPë. P’PëPIPsPrPëC,CHCḡCḡ C-P·
CḡPμCḡPμCḡ PīCḡP°PeC,PëCḡPSPs PīPsPIPsC-CḡC,Cḡ (PīPsPSP°Pr 95 %) CḡPμCḡPμP· 30
PiPsPrPëPS. PḡPëCḡPePsPIPëPNḡ PeP»C-CḡPμPSCḡ PīC-CḡP°CḡPμC,P°PjCḡ Cḡ P·PrPsCḡPsPIPëC...
PrPsP±CḡPsPIPsP»CHCḡC-PI CḡC,P°PSPsPIPëC,CH B 86 PjP»/C...PI.

PḡP»C-PSC-CḡPSC- C...P°CḡP°PeC,PμCḡPëCḡC,PëPePë.

PμPsPeP°P·P°PSPSCḡ.

P”PsCḡPsCḡP»C-:

- CḡPëPjPīC,PsPjP°C,PëCḡPSPμ P»C-PeCḡPIP°PSPSCḡ PīP°C,PsP»PsPiC-CḡPSPëC... CḡC,P°PSC-PI,
C°%Ps CḡCḡPīCḡPsPIPsPrPḡCḡC,CHCḡCḡ PīPsPiC-CḡCḡPμPSPSCḡPj PīP°Pjḡḡ™ CḡC,C-,
PePsPiPsC-C,PëPIPSPëPjPë CḡPsP·P»P°PrP°PjPë, P·P° PIPëPSCḡC,PePsPj
PrC-P°PiPSPsCḡC,PsPIP°PSPsC— PrPμPjPμPSCḡC-C— (CḡP»P°P±PsCḡPjCḡC,PIP°);

- P»C-PeCḡPIP°PSPSCḡ PePsCḡC,PëPeP°P»CHPSPsC— PjC-PsPeP»PsPSC-C— CḡPe
PjPsPSPsPīCḡPμPīP°CḡP°C, P°P±Ps Cḡ CḡPeP»P°PrC- PePsPjPīP»PμPeCḡPSPsC—
C,PμCḡP°PīC-C—. P”P»Cḡ PīPμCḡPμPIC-CḡPePë CḡCḡC,P»PëPIPsCḡC,C- PrPs
PīC-CḡP°CḡPμC,P°PjCḡ PjPsPḡPSP° PīCḡPsPIPμCḡC,Pë PīCḡPsP±PSPëPNḡ PeCḡCḡCḡ
P»C-PeCḡPIP°PSPSCḡ PīCḡPsC,CḡPiPsPj PsP±PjPμPḡPμPSPsPiPs PīPμCḡC-PsPrCḡ CḡP°CḡCḡ.

PμCḡPsC,PëPīPsPeP°P·P°PSPSCḡ.

PḡC-PrPIPëC°%PμPSP° CḡCḡC,P»PëPIC-CḡC,CH PrPs PīC-CḡP°CḡPμC,P°PjCḡ P°P±Ps
PīPsC...C-PrPSPëC... PīC-CḡPsP»C-PrPsPSCḡ, P° C,P°PePsPḡ PrPs C-PSCḡPëC...
PePsPjPīPsPSPμPSC,C-PI PīCḡPμPīP°CḡP°C,Cḡ.

P”PsCḡC,CḡPμ PīPsCḡCḡCḡPμPSPSCḡ PjPsP·PePsPIPsPiPs PeCḡPsPIPsPsP±C-PiCḡ
(PiPμPjPsCḡP°PīC-CḡPSPëPNḡ C-PSCḡCḡP»CHC,).

PḡPμCḡPjC-PSP°P»CHPSP° CḡC,P°PrC-Cḡ PSPëCḡPePsPIPsC— PSPμPrPsCḡC,P°C,PSPsCḡC,C-.

PI⁺PsC₇P_μC₁ PI⁺P°PSC,C-PSPI₂C,PsPSP°.

P'P·P°C''PjPsPrC-C₁ P· C-PSC€PëPjPë P»C-PeP°C₇C₁CH₂PePëPjPë P·P°C₁PsP±P°PjPë C,P° C-PSC€C- PIPëPrPë PIP·P°C''PjPsPrC-PN₂.

PjPëC₇P_μPsC—PrPSC- PiPsC₇PjPsPSPë.

P_μC₇Pë C₁C₁PjC-C₁PSPsPjC₁ P·P°C₁C,PsC₁C₁PI⁺P°PSPSC- P· C,PëC₇P_μPsC—PrPSPëPjPë
PiPsC₇PjPsPSP°PjPë (P₃ P₄) PjPsP₁P»PëPI⁺P° PiC-PrPI⁺PëC%₀P_μPSP°
PrC₇P°C,C-PI⁺P»PëPIC-C₁C,CH₂, PrP_μP·PsC₇C-C''PSC,P°C₁C-C₁ C- PiPsC₇C₁C€P_μPSPSC₁
C₁PSC₁.

P₃C₁P_μPSPsPeC₂PjP°C₇PsP».

P_μP»C-PSC-C₁PSC- PrPsC₁P»C-PrP₁P_μPSPSC₁ PiPsPeP°P·P°P»Pë, C%₀Ps C₁ C...PIPsC₇PëC... P·
C,C₁P₁P₁PePëPj PiP_μC₇P_μP±C-PiPsPj C₇P_μC₁PëPrPëPIC₁C₁C₁PsPiPs C,C₇PsPjP±PsP·C₁
P·P°C₁C,PsC₁C₁PI⁺P°PSPSC₁ PiC-C₇P°C₁P_μC,P°PjC₁ C₁ PrPsP·P°C... 9,6 Pi/PrPsP±C₁ PSP_μ
PI⁺P»PëPI⁺P°P»Ps PSP° PrPsP·C₁PI⁺P°PSPSC₁B P°C₁P_μPSPsPeC₁PjP°C₇PsP»C₁ PrP»C₁
PrPsC₁C₁PI⁺PSP_μPSPSC₁ P·PSP°C₁P_μPSPSC₁ INR 2,5B₇“3,5, P°P»P_μ PiC₇Pë PN₂PsPiPs
PsPrPSPsC₁P°C₁PSPsPjC₁ P·P°C₁C,PsC₁C₁PI⁺P°PSPSC- PIC-PrP·PSP°C₁P°P»PsC₁C₁
P·PSP°C₁PSP_μ P·PSPëP₁P_μPSPSC₁ C₇C-PI⁺PSC₁ P°PiC₇P_μPI⁺P°C₁C-C— C,C₇PsPjP±PsC₁PëC,C-PI,
PI⁺PëPIC-P»CH₂PSP_μPSPSC₁ β-C,C₇PsPjP±PsPiP»PsP±C₁P»C-PSC₁, C₇C-PI⁺PSC₁
C,,C-P±C₇PëPSPsPiP_μPSC₁, C,,P°PeC,PsC₇C-PI P'C-P»P»C-P±C₇P°PSPrC,P° (VIII: C; VIII: vW: Ag;
VIII: vW: Rco), PI₂B₇TM C₁P·PePsC₁C,C- C₁C-P»CH₂PSPsC— PeC₇PsPIC- C- PiP»P°P·PjPë.

P₃P°C₇PjP°PePsPeC-PSP_μC,PëC₁PSC- PIP·P°C''PjPsPrC-C—.

P₁PjPsPIC-C₇PSC-C₁C,CH₂ P·PjC-PSPë C,,P°C₇PjP°PePsPeC-PSP_μC,PëPePë
PiC-C₇P°C₁P_μC,P°PjC₁ PiC-Pr PrC-C''C₁ C-PSC€PëC... P»C-PeP°C₇C₁CH₂PePëC...
P·P°C₁PsP±C-PI PSPëP·CH₂PeP°, PsC₁PeC-P»CH₂PePë PiC₇PëP±P»PëP·PSPs 90 %
PiC₇P_μPI⁺P°C₇P°C,C₁ PIPëPI⁺PsPrPëC,CH₂C₁C₁ PI PSP_μP·PjC-PSP_μPSPsPjC₁ PIPëPiP»C₁PrC- P·
C₁P_μC₁P_μC₁.

In vitro PiC-C₇P°C₁P_μC,P°Pj PSP_μ PiC₇PëPiPSC-C₁C₁C'' PsC₁PSPsPI⁺PSC- C-P·PsC,,PsC₇PjPë
C₁PëC,PsC...C₇PsPjC₁ P 450 PiP_μC₁C-PSPëPë P»C₇PrPëPSPë CYP1A2, 2P'6, 2P'9, 2P'9, 2P'19,
2D6, 2P·1 C- 4P₃9/11 C₁ PePsPSC₁P_μPSC,C₇P°C₁C-C₁C... 142, 426, 1422 PjPePi/PjP».

P_μC₇Pë PePsPSC₁P_μPSC,C₇P°C₁C-C— 1422 PjPePi/PjP» PIC-PrP·PSP°C₁P_μPSPs
PSP_μP·PSP°C₁PSP_μ PiC₇PëPiPSC-C₁P_μPSPSC₁ CYP2A6 (21 %) C- P—P₃4/5 (11 %). P₃PrPSP°Pe
C₇C-PI⁺P_μPSCH₂ P_μC. PrP»C₁ C-PSPI₂C-P±C-C₁C-C— C₁PëC... PrPI⁺PsC... CYP-C-P·PsPjP_μC₇C-PI
PrPsC₁C,P°C,PSC-PN₂ PiC₇Pë PiP_μC₇P_μPI⁺PëC%₀P_μPSPSC- 1422 PjPePi/PjP». P₃PsPjC₁
PjP_μC,P°P±PsP»C-C₁PSP° PIP·P°C''PjPsPrC-C₁ P· PiC₇P_μPI⁺P°C₇P°C,P°PjPë, C%₀Ps
PiC-PrPrP°C₇C,CH₂C₁C₁ P±C-PsC,C₇P°PSC₁C,,PsC₇PjP°C₁C-C— C₁PëPjPë
C,,P_μC₇PjP_μPSC,P°PjPë, PjP°P»PsPN₂PjPsPIC-C₇PSP°.

P₄C₇PsC,PëP_μPiC-P»P_μPiC,PëC₁PSC- P»C-PeP°C₇C₁CH₂PeC- P·P°C₁PsP±Pë.

P—P°C₁C,PsC₁C₁PI⁺P°PSPSC₁ PiC-C₇P°C₁P_μC,P°PjC₁ PI PrPsP·C- 20 Pi/PrPsP±C₁
C%₀PsPrP_μPSPSPs PiC₇PsC,C₁PI⁺PsPj 4 C,PëP₁PSC-PI C- P±C-P»CH₂C€P_μ PSP_μ

P·PjC-PSCĤPIP°P»Ps PeCĤPëPICr PePsPSC†PμPSC,CĤP°C†C-C— C- PjP°PeCĤPëPjP°P»CHĤPSCr PePsPSC†PμPSC,CĤP°C†C-CĤ (PŸ_{max}) PĭCĤPsC,PëPμPĭC-P»PμPĭC,PëC†PSPëC... PĭCĤPμPĭP°CĤP°C,C-PI Cr CĤPëCĤPsPIP°C,C†C- PeCĤPsPIC- (PeP°CĤP±P°PjP°P·PμPĭC-PS, C„PμPSC-C,PsC—PS, C„PμPSPsP±P°CĤP±C-C,P°P», PSP°C,CĤC-CĤ PIP°P»CHĤPĭCĤPsP°C,) Cr C...PIPsCĤPëC... PSP° PμPĭC-P»PμPĭCĤC-CĤ, CĤPeC- PsC,CĤPëPjCrCĤC,CH CĤC,P°P±C-P»CHĤPSC- PrPsP·Pë.

PĥP»PePsPiPsP»CHĤ.

PŸCrPjC-CĤPSPëPNë PĭCĤPëPNëPsPj P· P°P»PePsPiPsP»PμPj PSPμ PIPĭP»PëPIP°PI PSP° CĤC-PIPμPSCĤ PePsPSC†PμPSC,CĤP°C†C-C— PĭC-CĤP°C†PμC,P°PjCr Cr PĭP»P°P·PjC- PeCĤPsPIC-, C- PePsPSC†PμPSC,CĤP°C†C-CĤ P°P»PePsPiPsP»CĤ PSPμ P·PjC-PSCĤPIP°P»P°CĤCĤ PĭCĤPë P·P°CĤC,PsCĤCrPIP°PSPSC- 1,6 Pĭ PĭC-CĤP°C†PμC,P°PjCr.

PĥCĤPsP±P»PëPIPsCĤC,C- P·P°CĤC,PsCĤCžPIP°PSPSCĤ.

P'PĭP»PëPI PSP° P°PĭCĤPμPĭP°C†C-CĤ C,CĤPsPjP±PsC†PëC,C-PI.

PJ P·PIBĤ™ CĤP·PeCr P· C,PëPj, C%Ps PĭC-CĤP°C†PμC,P°Pj P·PSPëPĤCrC" P°PĭCĤPμPĭP°C†C-CĤ C,CĤPsPjP±PsC†PëC,C-PI (PrPëPI. CĤPsP·PrC-P» B«PαP°CĤPjP°PePsPrPëPSP°PjC-PeP°B»), PSPμPsP±C...C-PrPSPs P· PsP±PμCĤPμPĤPSC-CĤC,CĤ PĭCĤPëP·PSP°C†P°C,Pë PĭCĤPμPĭP°CĤP°C, C...PIPsCĤPëPj P· PĭPsCĤCrC€PμPSPSCĤPj PĭPμPjPsCĤC,P°P·Cr, CĤC,P°PSP°PjPë, C%Ps PjPsPĤCrC,CH CĤCrPĭCĤPsPIPsPrPĤCrPIP°C,PëCĤCĤ PeCĤPsPIPsPIPëP»PëPIP°PjPë (PIPëCĤP°P·PeP° C€P»CrPSPePsPIPs-PePëC€PePsPIPsPiPs C,CĤP°PeC,Cr), PĭC-Pr C†P°CĤ P·PSP°C†PSPëC... C...C-CĤCrCĤPĭC-C†PSPëC... PsPĭPμCĤP°C†C-PNë (PIPeP»CĤC†P°CĤC†Pë CĤC,PsPjP°C,PsP»PsPĭC-C†PSC- PIC,CĤCrC†P°PSPSCĤ), C...PIPsCĤPëPj C-P· CĤPëPjPĭC,PsPjP°PjPë C,CĤPĤPePsC— PeCĤPsPIPsC,PμC†C- P°P±Ps C...PIPsCĤPëPj, CĤPeC- PjP°CĤC,CH PI P°PSP°PjPSPμP·C- PĭPμPjPsCĤP°PĭC-C†PSPëPNë C-PSCĤCrP»CHĤC,; PĭP°C†C-C"PS C,P°Pj, CĤPeC- P·P°CĤC,PsCĤPsPICrCĤC,CH P°PSC,PëPePsP°PĭCrP»CĤPSC,Pë, C,CĤPsPjP±PsC†PëC,P°CĤPSC- P°PSC,PëP°PĭCĤPμPĭP°PSC,Pë, PIPeP»CĤC†P°CĤC†Pë PSPëP·CHĤPeC- PrPsP·Pë P°C†PμC,PëP»CĤP°P»C-C†PëP»PsPIPsC— PePëCĤP»PsC,Pë.

PμPsCĤCžC€PμPSPSCĤ C„CžPSPeC†C-C— PSPëCĤPsPe.

PμCĤPμPĭP°CĤP°C, PIPëPIPsPrPëC,CHCĤCĤ PSPëCĤPeP°PjPë, C,PsPjCr PSPμPsP±C...C-PrPSPs PsCĤPsP±P»PëPICr CrPIP°PĭCr PĭCĤPëPrC-P»CĤC,Pë C...PIPsCĤPëPj P· PSPëCĤPePsPIPsCĤ PSPμPrPsCĤC,P°C,PSC-CĤC,CĤ (PrPëPI. CĤPsP·PrC-P» B«PŸPĭPsCĤC-P± P·P°CĤC,PsCĤCrPIP°PSPSCĤ C,P° PrPsP·PëB»).

PμP°C†C-C"PS C,Pë P»C-C,PSCHĤPsPiPs PIC-PeCž.

PμCĤPë PrPsPIPiPsC,CĤPëPIP°P»C-PNë C,PμCĤP°PĭC-C— Cr C...PIPsCĤPëC... P»C-C,PSCHĤPsPiPs PIC-PeCr CĤPμPePsPjPμPSPPrCrC"C,CHCĤCĤ CĤPμPĭCrP»CĤCĤPSPëPNë PePsPSC,CĤPsP»CH PĭPsPeP°P·PSPëPeC-PI C„CrPSPeC†C-C— PSPëCĤPsPe, P·P° PSPμPsP±C...C-PrPSPsCĤC,C- PePsCĤPëPĭCrCĤC,CH PrPsP·Cr P·P°P»PμPĤPSPs PIC-Pr CĤPμP·CrP»CHĤC,P°C,C-PI PrPsCĤP»C-PrPĤPμPSPSCĤ PeP»C-CĤPμPSCĤCr PeCĤPμP°C,PëPSC-PSCr (PrPëPI. CĤPsP·PrC-P» B«PŸPĭPsCĤC-P± P·P°CĤC,PsCĤCrPIP°PSPSCĤ C,P° PrPsP·PëB»).

PμPμCĤPμCĤPëPIP°PSPSCĤ P·P°CĤC,PsCĤCžPIP°PSPSCĤ.

PμCĤPë P»C-PeCrPIP°PSPSC- C...PIPsCĤPëC... PSP° PePsCĤC,PëPeP°P»CHĤPSCr

$$\underline{\text{P}''\text{PsCH}_2\text{PsCH}_2'\text{P}} \gg \text{C}-.$$

*P>C-PeCáPIP°PSPSCIJ CÍC,P°PSC-PI, C%oPs CÍCáPiCḡPsPIPsPrP¶CáCḡC,CHCÍCÍB
PiPsPiC-CḡC€PµPSPSCIJPj PiP°Pjḡḡ™ CÍC,C-, PePsPiPSC-C,PēPIPSpēPjPē CḡPsP·P»P°PrP°PjPē.*

P PµPePsPjPµPSPPrPsPIP°PSP° PrPsP±PsPIP° PrPsP·P° CÍC,P°PSPsPIpēC,CH 2,4ḡḡ“4,8 Pi.
P—P°P·PIpēC†P°PNḡ PrPsP·Cr CḡPsP·PiPsPrC-P»CÍCḡC,CH PSP° 2ḡḡ“3 PiCḡPēPNḡPsPjPē.

P>C-PeCáPIP°PSPSCIJ PePsCḡC,PēPeP°P»CHpSPsC— PjC-PsPeP»PsPSC-C—.

PµPsC†P°C,PePsPIP° PrPsP±PsPIP° PrPsP·P° CÍC,P°PSPsPIpēC,CH 7,2 Pi, CÍPeCr
P·P±C-P»CHC€CrCḡC,CH PSP° 4,8 Pi PePsP¶PSC- C,CḡPē P°P±Ps C†PsC,PēCḡPē PrPSC- PrPs
PjP°PeCÍPēPjP°P»CHpSPsC— PrPsP·Pē 24 Pi, CÍPeCr CḡPsP·PiPsPrC-P»CÍCḡC,CH PSP° PrPIP°
P°P±Ps C,CḡPē PiCḡPēPNḡPsPjPē. P>C-PeCáPIP°PSPSCIJ C-PSC€PēPjPē
P°PSC,PēPjC-PsPeP»PsPSC-C†PSPēPjPē P·P°CÍPsP±P°PjPē PiC-PrC,CḡPēPjCrC“C,CHCÍCÍ Cr
PiPsPiPµCḡPµPrPSCḡPs PiCḡPēP·PSP°C†PµPSPēC... PrPsP·P°C.... P—P°P»PµP¶PSPs PIC-Pr
PsC,CḡPēPjP°PSPsPiPs C,PµCḡP°PiPµPIC,PēC†PSPsPiPs PµC,,PµPeC,Cr, CÍPeC%oPs
PjPsP¶P»PēPIPs, CÍP»C-Pr P·PSPēP·PēC,Pē PrPsP·Cr C-PSC€PēC...
P°PSC,PēPjC-PsPeP»PsPSC-C†PSPēC... P>C-PeP°CḡCÍCHPePēC... P·P°CÍPsP±C-PI.

P>C-PeCáPIP°PSPSCIJ PiCḡPsPrPsPIP¶CÍCḡC,CH PrPs P·PSPēPePSPµPSPSCIJ
CÍPēPjPiC,PsPjC-PI P·P°C...PIPsCḡCḡPIP°PSPSCIJ. Pj PiP°C†C-C“PSC,C-PI P· PiPsCÍC,CḡPēPj
PiPµCḡPµP±C-PiPsPj P·P°C...PIPsCḡCḡPIP°PSPSCIJ P· C†P°CÍPsPj PjPsP¶Pµ
CÍPiPsCÍC,PµCḡC-PiP°C,PēCÍCÍ CÍPiPsPSC,P°PSPSPµ PiPsPeCḡP°C%oPµPSPSCIJ, C,PsPjCr
PePsP¶PSC- 6 PjC-CÍCÍC†C-PI CÍP»C-Pr CḡPsP±PēC,Pē CÍPiCḡPsP±Cr P·PSPēP·PēC,Pē
PrPsP·Cr P°P±Ps PIC-PrPjC-PSPēC,Pē P»C-PeCáPIP°PSPSCIJ PiCḡPµPiP°CḡP°C,PsPj. P—
C†C-C“Cḡ PjPµC,PsCḡ PrPsP·Cr PiC-CḡP°C†PµC,P°PjCr P·PSPēP¶CÍCḡC,CH PSP° 1,2 Pi
PePsP¶PSC- PrPIP° PrPSC- (PePsP¶PSC- C,CḡPē P°P±Ps C†PsC,PēCḡPē PrPSC- Cr CḡP°P·C-
CÍPēPSPPrCḡPsPjCr P>P°PSC†P° ḡḡ“ PḡPrP°PjCÍP° P· PjPµC,PsCḡ PiPsPiPµCḡPµPrP¶PµPSPSCIJ
CḡP°PiC,PsPIPsPiPs CḡPµC†PēPrPēPICr P°P±Ps PiPēPSPēPePSPµPSPSCIJ CÍCrPrPsPj,
PiPsPiḡḡ™ CÍP·P°PSPēC... P· PIC-PrPjC-PSPsCḡ PiCḡPµPiP°CḡP°C,Cr).

PhCÍPsP±P»PēPIC- PiCḡCáPiPē PiP°C†C-C“PSC,C-PI.

P—P°CÍC,PsCÍCrPIP°PSPSCIJ PiP°C†C-C“PSC,P°Pj P»C-C,PSCHPsPiPs PIC-PeCr.

PḡPsCḡPµPeC†C-CÍ PrPsP·Pē CḡPµPePsPjPµPSPPrCrC“C,CHCÍCÍ PiP°C†C-C“PSC,P°Pj
P»C-C,PSCHPsPiPs PIC-PeCr P· PrC-P°PiPSPsCÍC,PsPIP°PSPēPjPē P°P±Ps
PiC-PrPsP·CḡCḡPIP°PSPēPjPē CḡPsP·P»P°PrP°PjPē C,,CrPSPeC†C-C— PSPēCḡPsPe (PrPēPI.
CḡPsP·PrC-P» B«P“PsP·CrPIP°PSPSCIJ C...PIPsCḡPēPj P· PiPsCḡCrC€PµPSPSCIJPj
C,,CrPSPeC†C-C— PSPēCḡPsPeB»). PµCḡPē PrPsPIPiPsC,CḡPēPIP°P»PsPjCr P»C-PeCáPIP°PSPSC-
Cr CḡP°P·C- PSPµPsP±C...C-PrPSPsCÍC,C- C,P°PePēPj PiP°C†C-C“PSC,P°Pj PiPsC,CḡC-P±PSPs
PePsPSC,CḡPsP»CḡPIP°C,Pē PeP»C-CḡPµPSCÍ PeCḡPµP°C,PēPSC-PSCr P· PjPµC,PsCḡ
P°PrPµPePIP°C,PSPsC— PePsCḡPµPeC†C-C— PrPsP·Pē.

P“PsP·CrPIP°PSPSCIJ C...PIPsCḡPēPj P· PiPsCḡCrC€PµPSPSCIJPj C,,CrPSPeC†C-C— PSPēCḡPsPe.

PhCÍPeC-P»CHPePē PiCḡPµPiP°CḡP°C, PiPēPIPsPrPēC,CHCÍCÍ P· PsCḡPiP°PSC-P·PjCr
PSPēCḡPeP°PjPē, CÍP»C-Pr PiPēCÍPIP»CÍC,Pē PsP±PµCḡPµP¶PSC-CÍC,CH PiCḡPē
P»C-PeCáPIP°PSPSC- C...PIPsCḡPēC... P· PSPēCḡPePsPIPsCḡ PSPµPrPsCÍC,P°C,PSC-CÍC,Cḡ, Cr
C,P°PePēC... PiP°C†C-C“PSC,C-PI CḡPµPePsPjPµPSPPrCrC“C,CHCÍCÍ
PePsPSC,CḡPsP»CḡPIP°C,Pē C,,CrPSPeC†C-Cḡ PSPēCḡPsPe.

P—P±C-P»CHC€PµPSPSCIJ PiPµCḡC-PsPrCr PSP°PiC-PIPIPēPIPµPrPµPSPSCIJ
P±PµP·PiPsCÍPµCḡPµPrPSCḡPs PiPsPiḡḡ™ CÍP·P°PSPs P· PiPsPiC-CḡC€PµPSPSCIJPj

C,,CfPSPeC†C-C— PSPëCĤPsPe C- PeP»C-CĤPµPSCÍCf PeCĤPµP°C,PëPSC-PSCf. P|Pµ C,P°PePsP¶
CÍC,PsCÍCfC”C,CHCÍCĬ PİP°C†C-C”PSC,C-PI P»C-C,PSCHPsPiPs PIC-PeCf, Cf CĬPePëC...
PIPëPIPµPrPµPSPSCĬ PeCĤPµP°C,PëPSC-PSCf P·P°P»PµP¶PëC,CH PIC-Pr PIC-PeCf.
P†PSC,PµCĤPIP°P» PjC-P¶ PİCĤPëPNëPsPjP°PjPë PİPsC,CĤC-P±PSPs CÍPePsCĤPëPiCfPIP°C,Pë
PSP° PsCÍPSPsPIC- C,,CfPSPeC†C-C— PSPëCĤPsPe.

P PsP·CĤP°C...CfPSPsPe PrPsP·Pë PİCĤPsPIPsPrCĬC,CH PSP° PsCÍPSPsPIC-
PsC†C-PSPePë PeP»C-CĤPµPSCÍCf PeCĤPµP°C,PëPSC-PSCf Cf PİP°C†C-C”PSC,P° P·P°
C,,PsCĤPjCfP»PsCĤ:



P>C-PeCfPIP°PSPSCĬ C,P°PePëPj C...PIPsCĤPëPj PİCĤPëP·PSP°C†P°CĤC,CH P·P°P»PµP¶PSPs
PIC-Pr CÍC,CfPİPµPSCĬ C,CĬP¶PePsCÍC,C- PSPëCĤPePsPIPsC— PSPµPrPsCÍC,P°C,PSPsCÍC,C-,
PrPsC,CĤPëPjCfCĤC†PëCÍCĤ C,P°PePëC... CĤPµPePsPjPµPSPPrP°C†C-PNë:

PŸC,CfPİC-PSCH PSPëCĤPePsPIPsC— PSPµPrPsCÍC,P°C,PSPsCÍC,C- (PjP»/C...PI)	P»P»C-CĤPµPSCÍ PeCĤPµP°C,PëPSC-PSCf	P”PsP·CfPIP°PSPSCĬ
PkPsCĤPjP°P»CHPSP° C,,CfPSPeC†C-CĬ PSPëCĤPsPe	> 80	P—PIPëC†P°PNëPSP° PrPsP·P°, CĤPsP·PrC-P»PµPSP° PSP° 2 P°P±Ps 4 PİCĤPëPNëPsPjPë
P>PµPiPePëPNë	50BĤ”79	2/3 P·PIPëC†P°PNëPSPsC— PrPsP·Pë P·P° 2BĤ”3 PİCĤPëPNëPsPjPë
PµPsPjC-CĤPSPëPNë	30BĤ”49	1/3 P·PIPëC†P°PNëPSPsC— PrPsP·Pë P·P° 2 PİCĤPëPNëPsPjPë
PŸCĬP¶PePëPNë	< 30	1/6 P·PIPëC†P°PNëPSPsC— PrPsP·Pë PsPrPSPsCĤP°P·PsPIPs
PŸPµCĤPjC-PSP°P»CHPSP° CÍC,P°PrC-CĬ	BĤ”	PµCĤPsC,PëPiPsPeP°P·P°PSPs

P”PsP·CfPIP°PSPSCĬ C...PIPsCĤPëPj P· PİPsCĤCfC€PµPSPSCĬPj C,,CfPSPeC†C-C—
PİPµC†C-PSPePë.

P»PsCĤPëPiCfPIP°PSPSCĬ PrPsP·Pë PSPµ PİPsC,CĤC-P±PSPµ PrP»CĬ C...PIPsCĤPëC... P·
PİPsCĤCfC€PµPSPSCĬPj C,C-P»CHPePë C,,CfPSPeC†C-C— PİPµC†C-PSPePë. Pj CĤP°P·C-

PrC-P°PiPSPsCfC,PsPIP°PSPëC... P°P±Ps PiC-PrPsP·CfCfPIP°PSPëC... CfPsP·P»P°PrC-PI
C,,CrPSPeC†C-C— PiPµC†C-PSPePë C,P° PSPëCfPsPe PePsCfPµPeC†C-Cf PrPsP·Pë
PiCfPsPIPPrCfC,Ch C,P°Pe, CµPe PIPeP°P·P°PSPs Cr CfPsP·PrC-P»C- B«P°PsP·CrPIP°PSPSCf
C...PIPsCfPëPj P· PiPsCfCrC€PµPSPSCfPj C,,CrPSPeC†C-C— PSPëCfPsPeB».

P°C-C,Pë.

PkPµ P·P°CfC,PsCfPsPICfCfC,Ch.

PµPµCfPµPrPsP·CzPIP°PSPSCf.

PŸPëPjPiC,PsPjPë: PiPsCfPëP»PµPSPSCf PiCfPsCfPIC-PI PiPsP±C-C†PSPsC— PrC-C—
PiCfPµPiP°CfP°C,Cr. PŸPëPjPiC,PsPjPë PiPµCfPµPrPsP·CrPIP°PSPSCf
CfPiPsCfC,PµCfC-PiP°P»PëCfCf PiCfPë PiPµCfPsCfP°P»ChPSPsPjCr
P·P°CfC,PsCfCrPIP°PSPSC- PiCfPµPiP°CfP°C,Cr Cr PrPsP·C- 75 Pi.

P>C-PeCzPIP°PSPSCf CfPëPjPiC,PsPjP°C,PëC†PSPµ: PiCfPsPjPëPIP°PSPSCf C€P»CrPSPeP°,
C-PSPrCrPeC†C-Cf P±P»CfPIP°PSPSCf. PŸPiPµC†PëC,,C-C†PSPsPiPs P°PSC,PëPrPsC,P°
PSPµPjP°C", PjPsP¶PSP° P·P°CfC,PsCfPsPICfPIP°C,Pë PiPµPjPsPrC-P°P»C-P·
(PIPëPIPµPrPµPSPSCf 50Bf"60 % PiC-CfP°C†PµC,P°PjCr).

PµPsP±C-C†PSC- CfPµP°PeC†C-C—.

PµPsP±C-C†PSC- CfPµP°PeC†C-C—, PIC-PrPjC-C†PµPSC- Cr C...PsPrC- PeP»C-PSC-C†PSPëC...
PIPëPiCfPsP±CrPIP°PSCf C,P° PiCfPsC,CfPiPsPj PiPsCfC,PjP°CfPePµC,PëPSPiPsPiPs
CfPiPsCfC,PµCfPµP¶PµPSPSCf, PiPµCfPµCfP°C...PsPIP°PSC- P·P° PeP»P°CfP°PjPë
CfPëCfC,PµPj PsCfPiP°PSC-PI C,P° C†P°CfC,PsC,PsCf.

PŞP°CfC,PsC,P° PIPëP·PSP°C†P°C",ChCfCf C,P°PePëPj C†PëPSPsPj: PrCrP¶Pµ C†P°CfC,Ps (≥
1/10), C†P°CfC,Ps (≥ 1/100 PrPs <1/10), PSPµC†P°CfC,Ps (≥ 1/1000 PrPs <1/100), CfC-PrPePs (≥
1/10 000 PrPs <1/1000), PrCrP¶Pµ CfC-PrPePs (<1/10000), C†P°CfC,PsC,P° PSPµPIC-PrPsPjP°
(PSPµ PjPsP¶PSP° PsC†C-PSPëC,Pë C†P°CfC,PsC,CrB PSP° PsCfPSPsPIC- PrPsCfC,CrPiPSPëC...
PrP°PSPëC...).

PµPsCfC,PjP°CfPePµC,PëPSPiPsPIC- PrP°PSC- PSPµPrPsCfC,P°C,PSC- PrP»Cf
CfPsP·CfP°C...CrPSPeCr C†P°CfC,PsC,Pë PIPëPSPëPePSPµPSPSCf PiPsP±C-C†PSPëC...
CfPµP°PeC†C-PNë Cr PiCfPsP»C-PePsPIP°PSC-PNë PiPsPiCrP»CfC†C-C—.

P— P±PsPeCz PeCfPsPIC- C,P° P»C-PjC,,P°C,PëC†PSPsC— CfPëCfC,PµPjPë.

PŞP°CfC,PsC,P° PSPµPIC-PrPsPjP°: PiPµPjPsCfP°PiC-C†PSC- CfPsP·P»P°PrPë.

P— P±PsPeCz C-PjCzPSPSPsC— CfPëCfC,PµPjPë.

PŞP°CfC,PsC,P° PSPµPIC-PrPsPjP°: PiC-PiPµCfC†CrC,P»PëPIC-CfC,Ch,
P°PSP°C,,C-P»P°PeC,PsC—PrPSC- CfPµP°PeC†C-C—.

PµCfPëC...C-C†PSC- CfPsP·P»P°PrPë. B

$\text{P}_{\mu}\text{PsPIC}-\text{PrPsPjP}\gg\text{P}_{\mu}\text{PSPSC}\sqcup\text{P}\ddot{\text{C}}\overline{\text{C}}\overline{\text{H}}\text{Ps}\text{P}\ddot{\text{P}}\text{S}\text{P}\pm\text{C}-\text{C}\ddagger\text{PSC}-\overline{\text{C}}\overline{\text{H}}\text{P}_{\mu}\text{P}^{\circ}\text{PeC}\ddagger\text{C}-\text{C}-\text{P}\ddot{\text{C}}-\text{C}\ddagger\text{P}\gg\text{C}\sqcup$
 $\overline{\text{C}}\overline{\text{H}}\text{P}_{\mu}\text{C}''\text{C}\ddagger\text{C},\overline{\text{C}}\overline{\text{H}}\text{P}^{\circ}\text{C}\ddagger\text{C}-\text{C}-\text{P}\gg\text{C}-\text{PeP}^{\circ}\overline{\text{C}}\overline{\text{H}}\text{C}\ddagger\text{CHPePsPiPs}\text{P}\cdot\text{P}^{\circ}\text{C}\ddagger\text{PsP}\pm\text{C}\ddagger\text{PjP}^{\circ}\text{C}''\text{PIP}^{\circ}\text{P}\ddagger\text{P}\gg\text{P}\ddot{\text{P}}\text{PIP}_{\mu}$
 $\text{P}\cdot\text{PSP}^{\circ}\text{C}\ddagger\text{P}_{\mu}\text{PSPSC}\sqcup.\text{P}\ddagger\text{P}_{\mu}\text{PrP}^{\circ}\text{C}''\text{P}\cdot\text{PjPsPiC}\ddagger\text{P}\ddot{\text{C}}\overline{\text{C}}\overline{\text{H}}\text{PsPIP}\text{PrP}\ddot{\text{P}}\text{C},\text{P}\ddot{\text{P}}\text{PjPsPSC}-\text{C},\text{Ps}\overline{\text{C}}\overline{\text{H}}\text{P}\ddot{\text{P}}\text{PSPi}$
 $\text{C}\ddagger\text{P}\ddot{\text{C}}-\text{PIPIC}-\text{PrPSPsC}\ddagger\text{P}_{\mu}\text{PSPSC}\sqcup\text{PePsC}\overline{\text{C}}\overline{\text{H}}\text{P}\ddot{\text{P}}\text{C}\ddagger\text{C},\text{CH}/\overline{\text{C}}\overline{\text{H}}\text{P}\ddot{\text{P}}\text{P}\cdot\text{P}\ddot{\text{P}}\text{Pe}\text{P}\ddot{\text{C}}\overline{\text{C}}\overline{\text{H}}\text{P}\ddot{\text{P}}$

1) PŠPμPjC-PS P°CĤ PαPsCĤC-PμCÍC, 1, P°CĤP°C-PS Pμ-P>BĤ™ P°P»P»PμCíPr, 1420, P°PμP»CHbPiC-CĤ / Chemin Du Foriest 1, Braine-LbĤ™ alleud, 1420, Belgium;

2)B P_hP»CH₃C,,C₇P_uPr-P_kPsP±P_uP»CH₃-P_EC,C₇. 10, 40789 P_hPsPSC...P°PN₂P_j PSP° P P_uPN₂PSC-,
P_kC-P_jP_uC‡C‡P_ePSP° / Alfred-Nobel-Str. 10, 40789 Monheim am Rhein, Germany.

P—P°CΠIPSPëP_e.

P®P_YP' P_αP°C₇P_jP° P_Y.P_h., P'P_uP»CH₃PiC-C₇ /

UCB Pharma S.A., Belgium.

P_hC-C₇C‡P_uP·PSP°C...PsPrP¶P_uPSPSCΠ P·P°CΠIPSPëP_eP°.

P_hP»P»P_u PrP_u P»C₇ P P_uC€P_uC₇C€ 60, P'-1070 P'C₇C_hC₇P_uP»CH₃, P'P_uP»CH₃PiC-C₇ /

Allee de la Recherche 60, B-1070 Brussels, Belgium.