

**Pr Pk PŸ Pŷ P PJ Pľ P! P† Pİ**

**PrP»Cİ PjPµPrPëC‡PSPsPiPs P·P°CÍC,PsCÍCfPIP°PSPSCİ P»C-PeP°CĤCÍCHPePsPiPs  
P·P°CÍPsP±CÍ**

**P'P†PhP'P•Pk**

**(BIOVEN)**

**PŸPeP»P°Pr:**

*PrC-CĤC‡P° CĤPµC‡PsPIPëPSP°: C-PjCfPSPsPiP»PsP±CfP»C-PS P»CĤPrPëPSPë  
PSPsCĤPjP°P»CĤPSPëP№ / human normal immunoglobulin;*

1 PjP» PiCĤPµPiP°CĤP°C,CÍ PjC-CÍC,PëC,CH C-PjCfPSPsPiP»PsP±CfP»C-PS P»CĤPrPëPSPë  
PSPsCĤPjP°P»CĤPSPëP№ 0,1 Pi (PI C,PsPjCf C‡PëCÍP»C- C-PjCfPSPsPiP»PsP±CfP»C-PSCf  
G (IgG) PSPµ PjPµPSC€Pµ 98%);

*PrPsPiPsPjC-P¶PSC- CĤPµC‡PsPIPëPSPë: PiP»C-C†PëPS; PIPsPrP° PrP»Cİ C-PSBĤ™C"PeC†C-P№.*

**P»C-PeP°CĤCÍCHPeP° C,,PsCĤPjP°. P PsP·C‡PëPS PrP»Cİ C-PSC,,CfP·C-P№.**

**PhCÍPSPsPIPSC- C,,C-P·PëPePs-C...C-PjC-C‡PSC-  
PIP»P°CÍC,PëPIPsCÍC,C-: PiCĤPsP·PsCĤP° P°P±Ps P·  
PSPµP·PSP°C‡PSPsCĤ PsPiP°P»PµCÍC†PµPSC†C-C"CH,  
P±PµP·P±P°CĤPIPSP° P°P±Ps P·P»PµPiPeP°  
P¶PsPIC,CfPIP°C,PsPiPs PePsP»CHPsCĤCf CĤC-PrPëPSP°.**

**P»P°CĤPjP°PePsC,PµCĤP°PiPµPIC,PëC‡PSP° PiCĤCfPiP°. P†PjCfPSPsPiP»PsP±CfP»C-PS  
P»CĤPrPëPSPë PSPsCĤPjP°P»CĤPSPëP№ PrP»Cİ PIPSCfC,CĤC-C€PSCĤPsPIPµPSPsPiPs  
PIPIPµPrPµPSPSCİ.**

**PľPsPr PhPŸP† J06B A02.**

**P»P°CĤPjP°PePsP»PsPiC-C‡PSC- PIP»P°CÍC,PëPIPsCÍC,C-.**

**P»P°CĤPjP°PePsPrPëPSP°PjC-PeP°.**

**PµCĤPµPiP°CĤP°C, C" C-PjCfPSPsP»PsPiC-C‡PSPs P°PeC,PëPIPSPsCĤ P±C-P»PePsIPsCĤ**

C,,CḡP°PeC†C-C"ḡḡ (CḡPsP·PīPsPrC-P» PīC-PrPeP»P°CḡC-PI C-PjCḡPSPsPiP»PsP±CḡP»C-PSCḡ G Cḡ PīCḡPμPīP°CḡP°C,C-: IgG1: 65,6 %, IgG2: 22,1 %, IgG3: 10,8 %,B IgG4: 1,5 %), PīCḡP°PSPēC†PSPēPNḡ PIPjC-CḡC, C-PjCḡPSPsPiP»PsP±CḡP»C-PSCḡ Pḡ Cḡ PīCḡPμPīP°CḡP°C,C- CḡC,P°PSPsPIPēC,Cḡ 50 PjPePi/PjP».

P"ḡ-C-ḡC†PēPj PePsPjPīPsPSPμPSC,PsPj PīCḡPμPīP°CḡP°C,Cḡ C" P°PSC,PēC,C-P»P°, C%ḡPs PIPsP»PsPrC-ḡC,Cḡ CḡPīPμC†PēC,,C-C†PSPsḡḡ P°PeC,PēPIPSC-CḡC,Cḡ PīCḡPsC,Pē CḡC-P·PSPēC... P·P±CḡPrPSPēPeC-PI P·P°C...PIPḡCḡCḡPIP°PSCḡ Bḡ" PIC-CḡCḡCḡC-PI C- P±P°PeC,PμCḡC-PNḡ, Cḡ C,,Cḡ. PīPμPīP°C,PēC,Cḡ Pḡ C- P', C†PēC,PsPjPμPīP°P»PsPIC-CḡCḡCḡCḡ, PIC-CḡCḡCḡCḡ PīPμCḡPīPμCḡCḡ P»CḡPrPēPSPē 1 C,PēPīCḡ, 2 C,PēPīCḡ C,P° 6 C,PēPīCḡ, PIC-CḡCḡCḡCḡ P·PīCēC,PμPNḡPSP°-P°P°CḡCḡ, PIC-C,CḡCḡPSPsC— PIC-CḡPīPē, PīCḡPēPīCḡ, PePsCḡCḡ, PīP°CḡPsC,PēC,Cḡ, PīPsP»C-PsPjC-C"»C-C,Cḡ, PeCḡP°CḡPSCḡC...Pē, PePsPeP»CḡCēCḡ, CḡC,P°C,,C-P»PsPePsPeCḡ, PePēCēPePsPIPḡC— PīP°P»PēC†PePē, PīPSPμPIPjPsPePsPeP°, PīCḡP°PIC†PμPIPḡPs C,P° PrPēC,,C,PμCḡC-PNḡPSPsPiPs C,PsPeCḡPēPSCḡ. PḡP°C" C,P°PePsPḡ PSPμCḡPīPμC†PēC,,C-C†PSCḡ P°PeC,PēPIPSC-CḡC,Cḡ, C%ḡPs PīCḡPsCḡPIP»CḡC"ḡ,CḡCḡCḡCḡ Cḡ PīC-PrPIPēC%ḡPμPSPSC- CḡPμP·PēCḡC,PμPSC,PSPsCḡC,C- PsCḡPīP°PSC-P·PjCḡ.

PμCḡPμPīP°CḡP°C, PIPsP»PsPrC-C" PSPēP·CḡPePsCḡ CḡPīPsPSC,P°PSPSPsCḡ P°PSC,PēPePsPjPīP»PμPjPμPSC,P°CḡPSPsCḡ P°PeC,PēPIPSC-CḡC,Cḡ.

PμCḡPμPīP°CḡP°C, C" PSP°C,PēPIPSPēPj C-PjCḡPSPsPiP»PsP±CḡP»C-PSPsPj G, P·P±PμCḡC-PiP°C" PICḡC- P±C-PsP»PsPiC-C†PSC- PIP»P°CḡC,PēPIPḡCḡC,C-: P°PeC,PēPIP°C†C-Cḡ PePsPjPīP»PμPjPμPSC,Cḡ, PμC,,PμPeC,PsCḡPSCḡ C,P° PsPīCḡPsPSPs- C,,P°PīPsC†PēC,P°CḡPSCḡ C,,CḡPSPeC†C-C—.

PμCḡPμPīP°CḡP°C, C" C-PjCḡPSPsP»PsPiC-C†PSPs P°PeC,PēPIPSPsCḡ P±C-P»PePsPIPḡCḡ C,,CḡP°PeC†C-C"ḡḡ, C%ḡPs PIPēPrC-P»PμPSP° P· CḡPēCḡPsPIP°C,PePē P°P±Ps PīP»P°P·PjPē PeCḡPsPIC- P»CḡPrPēPSPē, PīPμCḡPμPIC-CḡPμPSPēC... PSP° PIC-PrCḡCḡCḡ,PSC-CḡC,Cḡ P°PSC,PēC,C-P» PrPs P'P†P>-1, P'P†P>-2, PrPs PIC-CḡCḡCḡCḡ PīPμPīP°C,PēC,Cḡ Pḡ C,P° PīPsPIPμCḡC...PSPμPIPḡPs P°PSC,PēPīPμPSCḡ PIC-CḡCḡCḡCḡ PīPμPīP°C,PēC,Cḡ P', PsC†PēC%ḡPμPSPsCḡ C,P° PePsPSC†PμPSC,CḡPsPIP°PSPsCḡ PjPμC,PsPrPsPj C,,CḡP°PeC†C-PsPSCḡPIP°PSPSCḡ CḡPīPēCḡC,PsPIPḡPrPSPēPjPē PsCḡP°PrPSPēPeP°PjPē, CḡPeP° PīCḡPsPNḡCēP»P° CḡC,P°PrC-Cḡ PIC-CḡCḡCḡPSPsC— C-PSP°PeC,PēPIP°C†C-C— CḡPsP»CḡPIPμPSC,-PrPμC,PμCḡPīPμPSC,PSPēPj PjPμC,PsPrPsPj C,P° PjPμC,PsPrPsPj PSP°PSPsC,,C-P»CḡC,CḡP°C†C-C—.

*PḡP»C-PSC-C†PSC- PrPsCḡP»C-PrPḡPμPSPSCḡ*

Pj PIC-PrPeCḡPēC,PsPjCḡ PjC-PḡPSP°CḡPsPrPSPsPjCḡ P±P°PīP°C,PsC†PμPSC,CḡPsPIPḡPjCḡ PrPsCḡP»C-PrPḡPμPSPSC- III C,,P°P·Pē, PIC-PrPīPsPIC-PrPSPs PrPs Guideline on the clinical investigation of human normal immunoglobulin for intravenous administration (IVIg) 28 June 2018 EMA/CHMP/BPWP/94033/2007 rev.3 Committee for Medicinal Products for Human Use (CHMP), PIPēPIC†P»PēCḡCḡ PμC,,PμPeC,PēPIPSC-CḡC,Cḡ, P±PμP·PīPμPeP° C,P° PrPμCḡPeC- PīP°CḡP°PjPμC,CḡPē C,,P°CḡP°PjP°PePsPeC-PSPμC,PēPePē PīCḡPμPīP°CḡP°C,Cḡ P'ḡC-PsPIPμPS Cḡ PīP°C†C-C"ḡḡ,C-PI P· PīPμCḡPIPēPSPSPēPjPē C-PjCḡPSPsPrPμC,,C-C†PēC,P°PjPē (PμP†P"). PμP°C†C-C"ḡḡPSC,Pē PsC,CḡPēPjCḡPIP°P»Pē P'ḡC-PsPIPμPS PīCḡPsC,CḡPīPsPj 1 CḡPsPeCḡ 1 CḡP°P· PSP° 4 C,PēPḡPSC- Cḡ CḡPμCḡPμPrPSC-PNḡ PrPsP·C- 0,5 Pi/PePi PjP°CḡPē C,C-P»P°. Pj PīP°C†C-C"ḡḡPSC,C-PI PsC†C-PSCḡPIP°P»Pē CḡC-PIPμPSCḡ C-PjCḡPSPsPiP»PsP±CḡP»C-PSCḡ, PeC-P»CḡPeC-CḡC,Cḡ PIPēPīP°PrPeC-PI C-PSC,,PμPeC†C-PNḡ, PīPsPeP°P·PSPēPePē PeP»C-PSC-C†PSPsPiPs C,P° P±C-PsC...C-PjC-C†PSPsPiPs P°PSP°P»C-P·Cḡ PeCḡPsPIC-. PḡP°PePsPḡ

PsC†C-PSC†PIP°P»PëC†C†C† PSP°PNëPIP°P¶P»PëPIC-C€C- PïPsPeP°P·PSPëPePë C†PsP±PsC,Pë C†PµC†C†C†C†, PrPëC...P°PSPSC†C†, PIPëP·PSP°C†P°P»P°C†C†C† C,PµPjPiPµC†P°C,C†C†P° C,C-P»P°, C,,C-PeC†C†PIP°P»PëC†C†C† C†C†C- PIPëPiP°PrPePë PjPsP¶P»PëPIPëC... PïPsP±C-C†PSPëC... C†PµP°PeC†C-C—.

PµC†PsC,C†PiPsPj 1 C†PsPeC† P»C-PeC†PIP°PSPSC†C† P·P°C,,C-PeC†PsPIP°PSPs 1 PIPëPiP°PrPsPe C†PµC†PµPNëPsP·PSPëC... C-PSC,,PµPeC†C-PNëPSPëC... P·P°C...PIPSC†C†PIP°PSC†C† (2,3%, P°P±Ps 0,023 PIPëPiP°PrPeC† PSP° 1 PïP°C†C-C”PSC,P° PSP° C†C-Pe). PµPµPrC-P°PSP° PjC-PSC-PjP°P»C†PSPsC— PePsPSC†PµPSC,C†P°C†C-C— C-PjC†PSPsPiP»PsP±C†P»C-PSC† PI PïP»P°P·PjC- PeC†PsPIC- P±C†P»P° P·PSP°C†PSPs PIPëC%P° P·P° PjC-PSC-PjP°P»C†PSPëPµ C†C-P»C†PsPIPëPµ C†C-PIPµPSC†C† 5 Pi/P» C- PïC-C†P»C†C† 6 PjC-C†C†C†C†C†-PI P»C-PeC†PIP°PSPSC†C† C†C†,P°PSPsPIPëP»P° 8,6 Pi/P», P° PïC-C†P»C†C† 1 C†PsPeC† в†” 8,8 Pi/P».B

P’ PïC†C†PïC- P· 49 PïP°C†C-C”PSC,C-PI, C%Ps PsC,C†PëPjC†PIP°P»Pë P’C-PsPIPµPS, P±C†P»Ps P·P°C,,C-PeC†PsPIP°PSPs 20 PIPëPiP°PrPeC-PI PïPsP±C-C†PSPëC... C†PIPëC% P»PµPiPePsPiPs (2%) C,P° C†PµC†PµPrPSC†C†PsPiPs C†C†,C†PïPµPSC†C† C,C†P¶PePsC†C†,C- (0,5%), C%Ps P·P°PiP°P»PsPj C†PeP»P°PrP°P»Ps 2,5% PµPïC-P·PsPrC-PI PIPµPrPµPSPSC†C†.B PkPµ P·P°C,,C-PeC†PsPIP°PSPs PIPëPiP°PrPeC-PI PeP»C-PSC-C†PSPs P·PSP°C†C†C%PsPiPs PIC-PrC...PëP»PµPSPSC†C† PïPsPeP°P·PSPëPeC-PI P»P°P±PsC†P°C,PSC†PSPëC... PrPsC†P»C-PrP¶PµPSC†C†, C%Ps P±C†P»Pë PïPsPiPë™ C†P·P°PSC- P· PIPµPrPµPSPSC†C†Pj PïC†PµPiP°C†P°C,C† P°P±Ps PIPëPjP°PiP°P»Pë PïC†PëPiPëPSPµPSPSC†C† P»C-PeC†PIP°PSPSC†C†. 18 PïP°C†C-C”PSC,P°Pj (PrPsC†PµC†P»PëPj C,P° PrC-C,C†Pj) P’C-PsPIPµPS PIPµPrPëP»Pë P·C- P·C†PsC†C†,P°C†C†PµC†C† C€PIPëPrPeC-C†C†,C† C-PSC,,C†P·C-C—. PkP° PïPµC†C†PµPjC† PµC,P°PïC- PrPsC†P»C-PrP¶PµPSPSC†C† C€PIPëPrPeC-C†C†,C† PIPµPrPµPSPSC†C† P·C†PsC†C†,P°P»P° PrPs 5,0 PjP»/PePi/PiPsPr (0,08 PjP»/PePi/C...PI); PSP° PrC†C†PiPsPjC† PµC,P°PïC- в†” PrPs 7,0 PjP»/PePi/PiPsPr (0,11 PjP»/PePi/C...PI). PµP°PeC†PëPjP°P»C†PSP° C€PIPëPrPeC-C†C†,C† PIPµPrPµPSPSC†C† PSP° C,C†PµC,C†PsPjC† PµC,P°PïC- C†C†,P°PSPsPIPëP»P° 8,5 PjP»/PePi/PiPsPr (0,14 PjP»/PePi/C...PI).B P§P°C†C†,PsC,P° C†PsP·PIPëC,PeC† PïPsP±C-C†PSPëC... C†PIPëC% P±C†P»P° PSPëP·C†PePsC† (2 PIPëPiP°PrPePë PSP° 35 PsPeC†PµPjPëC... PIPµPrPµPSC†C†), PIPsPSPë PjP°P»Pë P»PµPiPePëPµ C...P°C†P°PeC,PµC†, PSPµ PePsC†PµP»C†PIP°P»Pë P·C- C€PIPëPrPeC-C†C†,C† C-PSC,,C†P·C-C—. PkP° PsC†PSPsPIC- PïPsC€PëC†PµPSPsC†C†,C- PïPsP±C-C†PSPëC... C†PIPëC% C,P° PsC†C-PSPePë PrPëPSP°PjC-PePë PsC†PSPsPIPSPëC... PïPsPeP°P·PSPëPeC-PI P¶PëC,C,C”PrC-C†P»C†PSPsC†C†,C- PïPµC†PµPSPsC†PëPjC-C†C†,C† PïC†PµPiP°C†P°C,C† P’C-PsPIPµPS P·P° PjP°PeC†PëPjP°P»C†PSPsC— C€PIPëPrPePsC†C†,C- PIPµPrPµPSPSC†C† 8,5 PjP»/PePi/PiPsPr (0,14 PjP»/PePi/C...PI) C† 94,0 % PïP°C†C-C”PSC,C-PI P±C†P»P° PsC†C-PSPµPSP° C†Pe C...PsC†PsC€P°, C† 6,0 % в†” C†Pe P·P°PrPsPIC-P»C†PSP°.

PµP»C-PSC-C†PSP° PµC,,PµPeC,PëPIPSC-C†C†,C† P·P°C†C†,PsC†C†PIP°PSPSC†C† P»C-PeP°C†C†C†PePsPiPs P·P°C†PsP±C† P’C-PsPIPµPS C† C†PeP»P°PrC- PePsPjPiP»PµPeC†PSPsC— C,PµC†P°PïC-C— PïP°C†C-C”PSC,C-PI P· C,C†P¶PePsC† PïPSPµPIPjPsPSC-C”C†, C†PïC†PëC†PëPSPµPSPsC† PePsC†PsPSP°PIC-C†C†C†PSPsC† C-PSC,,PµPeC†C-C”C† COVID-19 / SARS-CoV-2, P·P°P±PµP·PiPµC†C†C”C,C†C†C†C† PNëPsPiPs PIP»P°C†C†,PëPIC-C†C†,C† C†PëPSPëC,Pë C-PjC†PSPsPjPsPrC†P»C†C†C†C† PrC-C†. P’ C†PµP·C†P»C†C†,P°C,C- P·PSPëP¶C†C”C,C†C†C†C† PIPëC†P°P¶PµPSC-C†C†,C† PiPsC†C†,C†PsPiPs C†PµC†PïC-C†P°C,PSC†PSPsPiPs PrPëC†C†,C†PµC†C†-C†PëPSPPrC†PµPjC† C-, C†Pe PSP°C†P»C-PrPsPe, P·PSPëP¶C†C”C,C†C†C†C† C†C†,C†PïC-PSC†C† PrPëC...P°P»C†PSPsC— PSPµPrPsC†C†,P°C,PSPsC†C†,C-.

PkP°C†PIPSC-C†C†,C† PeP»C-PSC-C†PSPsC— PµC,,PµPeC,PëPIPSPsC†C†,C- P±C†P»Ps PïC-PrC,PIPµC†PµPrP¶PµPSPs PI C†P°PjPeP°C... PeP»C-PSC-C†PSPsPiPs PrPsC†P»C-PrP¶PµPSPSC†C† B«P’C-PrPeC†PëC,Pµ P±P°PiP°C,PSC†PµPSC,C†PsPIPµ

СҗP°PSPPrPsPjC-P·PsPIP°PSPµ PrPsCГP»C-PrP¶PµPSPSCЦ P· PsC†C-PSPePë  
PµC,,PµPeC,PëPIPIPSCГC,C- PiCҗPµPiP°CҗP°C,Cr P'C-PsPIPµPS, PIPëCҗPsP±PSPëC†C,PIP°  
PÿPhP' B«P'C-PsC,,P°CҗPjP° PµP»P°P·PjP°B», PI PePsPjPiP»PµPeCГPSC-PNë C,PµCҗP°PiC-C—  
PiP°C†C-C"°PSC,C-PI P· PiPSPµPIPIjPsPSC-C"°Cҗ, CГPiCҗPëC±PëPSPµPSPsCҗ  
PePsCҗPsPSP°PIC-CҗCрCГPSPsCҗ C-PSC,,PµPeC†C-C"°Cҗ COVID-19 / SARS-CoV-2B» (PePsPr  
PrPsCГP»C-PrP¶PµPSPSCЦ Bҗ" 2020-BV-BP).

PJ PrPsCГP»C-PrP¶PµPSPSC- PIP·CЦP»Pë CрC±P°CГC,CH 76 PiP°C†C-C"°PSC,C-PI P·  
PiC-PrC,PIPµCҗPrP¶PµPSPëPj P·P° PICГC-PjP° PeCҗPëC,PµCҗC-CЦPjPë PrC-P°PiPSPsP·PsPj. 66  
PiP°C†C-C"°PSC,C-PI, C°Ps PiCҗPsPNëC€P»Pë CГPeCҗPëPSC-PSPi C,P° PSPµ PjP°P»Pë  
PeCҗPëC,PµCҗC-C—PI PIPëPeP»CҗC±PµPSPSCЦ, P±CрP»Pë CҗP°PSPPrPsPjC-P·PsPIP°PSC- Cр 2  
PiCҗCрPiPë (PrPsCГP»C-PrP¶CрPIP°PSP° PiCҗCрPiP° Bҗ" P'C-PsPIPµPS P±P°P·PsPIP°  
C,PµCҗP°PiC-CЦ C,P° PePsPSC,CҗPsP»CHPSP° PiCҗCрPiP° Bҗ" P»PëC€Pµ P±P°P·PsPIP°  
C,PµCҗP°PiC-CЦ).

P' PiP°C†C-C"°PSC,C-PI PIPëP·PSP°C±P°P»PëCГCЦ PiPsPeP°P·PSPëPePë CҗPsP±PsC,Pë  
PrPëC...P°P»CHPSPsC— CГPëCГC,PµPjPë, P·P°PiP°P»CHPSPsPiPs CГC,P°PSCр,  
C,CҗPëPIP°P»C-CГC,CH PiPsC,CҗPµP±Pë Cр C-PSC,PµPSCГPëPIPSC-PNë C,PµCҗP°PiC-C—,  
PiPsC,CҗPµP±Pë Cр C€C,CрC±PSC-PNë PIPµPSC,PëP»CЦC†C-C— P»PµPiPµPSC-PI (PëP'P),  
P·P°PiP°P»CHPSPëPNë C,PµCҗPjC-PS P»C-PeCрPIP°PSPSCЦ. PÿP°PePsP¶  
PsC†C-PSCҗPIP°P»P°CГCҗ PIPëP¶PëPIP°PSC-CГC,CH PiCҗPsC,CЦPiPsPj 28-PrPµPSPSPsPiPs  
PiPµCҗC-PsPrCр CГPiPsCГC,PµCҗPµP¶PµPSPSCЦ, P»P°P±PsCҗP°C,PsCҗPSC-  
PiPsPeP°P·PSPëPePë PeCҗPsPIC- (P·P°PiP°P»CHPSPëPNë P°PSP°P»C·P· C,P°  
P±C-PsC...C-PjC-C±PSPëPNë), P° C,P°PePsP¶ CҗC-PIPSC- C†PëC,PsPeC-PSC-PI,  
C,,P°PeC,PsCҗC-PI P·P°PiP°P»PµPSPSCЦ C,P° C-PSC€C- PiPsPeP°P·PSPëPePë CГC,P°PSCр  
C-PjCрPSPSPsC— CГPëCГC,PµPjPë.

P—P° CҗPµP·CрP»CHC,P°C,P°PjPë PrPsCГP»C-PrP¶PµPSPSCЦ P±CрP»Ps PrPsPIPµPrPµPSPs  
PiPµCҗPµPIP°P¶P°CҗC±Cр PµC,,PµPeC,PëPIPSC-CГC,CH P·P° PiPsP»PsPIPSPsCҗ  
P·PjC-PSPSPsCҗ.

P"PsCГC,PsPIC-CҗPSPs C€PIPëPrC€Pµ PSP°CГC,P°C" PiPsPeCҗP°C°PµPSPSCЦ CГC,P°PSCр:  
PrPsCГP»C-PrP¶CрPIP°PSP° PiCҗCрPiP° Bҗ" PSP° 5 PrPµPSCҗ  
(PjC-P¶PePIP°CҗC,PëP»CHPSPëPNë C-PSC,PµCҗPIP°P» Bҗ" 3,50Bҗ"7,25 PrPSCЦ),  
PePsPSC,CҗPsP»CHPSP° PiCҗCрPiP° Bҗ" PSP° 9 PrPµPSCҗ (PjC-P¶PePIP°CҗC,PëP»CHPSPëPNë  
C-PSC,PµCҗPIP°P» Bҗ" 6,00Bҗ"14,75 PrPSCЦ), Cҗ = 0,0073. P†PjPsPIC-CҗPSC-CГC,CH  
PrPsCГCЦPiPSPµPSPSCЦ CГC,P°P±C-P»C-P·P°C†C-C— CГC,P°PSCр Cр PiP°C†C-C"°PSC,C-PI  
PrPsCГP»C-PrP¶CрPIP°PSPsC— PiCҗCрPiPë PrPsCГC,PsPIC-CҗPSPs PIPëC°P° Cр 2,27 CҗP°P·P°  
(95 % PrPsPIC-CҗC±PëPNë C-PSC,PµCҗPIP°P» (P"Pt) Bҗ" 1,26Bҗ"4,11, Cҗ = 0,006), PSC-P¶ Cр  
PiP°C†C-C"°PSC,C-PI PePsPSC,CҗPsP»CHPSPsC— PiCҗCрPiPë.

PµPµCҗPµPIP°P¶P°CҗC±P° PµC,,PµPeC,PëPIPSC-CГC,CH PiC-PrC,PIPµCҗPrP¶CрC"°C,CHCГCЦ  
C,P°PePsP¶ P·P° PIC,PsCҗPëPSPSPëPjPë P·PjC-PSPSPëPjPë. PµCҗPë P·P°CГC,PsCГCрPIP°PSPSC-  
P'C-PsPIPµPSCр Cр CГC...PµPjC- P»C-PeCрPIP°PSPSCЦ P»PµC,P°P»CHPSC-CГC,CH PIC-Pr  
COVID-19 C" PrPsCГC,PsPIC-CҗPSPs PjPµPSC€PsCҗ: Cр PrPsCГP»C-PrP¶CрPIP°PSC-PNë  
PiCҗCрPiC- Bҗ" 6,25 % (2 PIPëPiP°PrPePë P· 32 CрC±P°CГPSPëPeC-PI), Cр  
PePsPSC,CҗPsP»CHPSC-PNë PiCҗCрPiC- Bҗ" 23,63 % (8 PIPëPiP°PrPeC-PI PSP° 34  
CрC±P°CГPSPëPePë), Cҗ=0,039.

PÿP°PePsP¶ PrPsCГC,PsPIC-CҗPSPs P·PjPµPSC€CрC"°C,CHCГCЦ C,CҗPëPIP°P»C-CГC,CH  
P»C-PjC,,PsPiPµPSC-C—. PҗPµPrC-P°PSP° PrPsCГCЦPiPSPµPSPSCЦ CҗC-PIPSCЦ  
P»C-PjC,,PsC†PëC,C-PI 1000 PeP»/PjPj<sup>3</sup> C- PIPëC°Pµ Cр PrPsCГP»C-PrP¶CрPIP°PSC-PNë

PiC<sub>7</sub>C<sub>7</sub>PiC- B<sub>7</sub>" PSP° 4 PrPμPSC<sub>7</sub> (PjC-P<sub>7</sub>PePIP°C<sub>7</sub>C, PēP»CH<sub>7</sub>PSPēP<sub>7</sub> C-PSC, PμC<sub>7</sub>PIP°P» B<sub>7</sub>" 3,00B<sub>7</sub>"5,00 PrPSC<sub>7</sub>), C<sub>7</sub> PePsPSC, C<sub>7</sub>PsP»CH<sub>7</sub>PSC-P<sub>7</sub> PiC<sub>7</sub>C<sub>7</sub>PiC- B<sub>7</sub>" PSP° 7 PrPμPSC<sub>7</sub> (PjC-P<sub>7</sub>PePIP°C<sub>7</sub>C, PēP»CH<sub>7</sub>PSPēP<sub>7</sub> C-PSC, PμC<sub>7</sub>PIP°P» B<sub>7</sub>" 3,00B<sub>7</sub>"7,50 PrPSC<sub>7</sub>), C<sub>7</sub> = 0,0097.

*PαP°C<sub>7</sub>PjP°PePsPeC-PSPμC, PēPeP°.*

P'PēC<sub>7</sub>PsPeP° PμC,, PμPeC, PēPIPSC-C<sub>7</sub>C, CH<sub>7</sub> PiC<sub>7</sub>PμPiP°C<sub>7</sub>P°C, C<sub>7</sub>  
P·P°P±PμP·PiPμC±C<sub>7</sub>C" C, CH<sub>7</sub>C<sub>7</sub>C<sub>7</sub> CēPIPēPrPePēPj C- C<sub>7</sub>C, PsPIC-PrC<sub>7</sub>PsC, PePsPIPēPj  
PSP°PrC...PsPrP<sub>7</sub>PμPSPSC<sub>7</sub>Pj P°PSC, PēC, C-P» PrPs PeC<sub>7</sub>PsPIP<sub>7</sub>C, PsPeC<sub>7</sub> C-  
PSPsC<sub>7</sub>PjP°P»CH<sub>7</sub>PSPēPj PiPμC<sub>7</sub>C-PsPrPsPj PSP°PiC-PIPIPēPIPμPrPμPSPSC<sub>7</sub> P·  
PsC<sub>7</sub>PiP°PSC-P·PjC<sub>7</sub>.

PμC-C<sub>7</sub>P»C<sub>7</sub> PIPSC<sub>7</sub>C, C<sub>7</sub>C-CēPSC<sub>7</sub>PsPIPμPSPSPsPiPs PIPμPrPμPSPSC<sub>7</sub>  
P±C-PsPrPsC<sub>7</sub>C, C<sub>7</sub>PiPSC-C<sub>7</sub>C, CH<sub>7</sub> PSPsC<sub>7</sub>PjP°P»CH<sub>7</sub>PSPsPiPs  
C-PjC<sub>7</sub>PSPsPiP»PsP±C<sub>7</sub>P»C-PSC<sub>7</sub> P»C<sub>7</sub>PrPēPSPē C<sub>7</sub> PeC<sub>7</sub>PsPIP<sub>7</sub>PsP±C-PiC<sub>7</sub>  
C<sub>7</sub>PμC<sub>7</sub>PēPiC-C" PSC, P° C" PSPμPiP°P<sub>7</sub>PSPsC<sub>7</sub> C, P° PiPsPIPSPsC<sub>7</sub>. P'C-PS  
CēPIPēPrPePs C<sub>7</sub>PsP·PiPsPrC-P»C<sub>7</sub>C" C, CH<sub>7</sub>C<sub>7</sub>C<sub>7</sub> PjC-P<sub>7</sub> PiP»P°P·PjPsC<sub>7</sub> C, P°  
PμPeC<sub>7</sub>C, C<sub>7</sub>P°PIP°C<sub>7</sub>PeC<sub>7</sub>P»C<sub>7</sub>C<sub>7</sub>PSPsC<sub>7</sub> C<sub>7</sub>C-PrPēPSPsC<sub>7</sub>, PiC<sub>7</sub>PēP±P»PēP·PSPs  
C±PμC<sub>7</sub>PμP· 3-5 PrPSC-PI PrPsC<sub>7</sub>C<sub>7</sub>PiP°C" C, CH<sub>7</sub>C<sub>7</sub>C<sub>7</sub> C<sub>7</sub>C-PIPSPsPIP°PiP° PjC-P<sub>7</sub>  
C-PSC, C<sub>7</sub>P°- C, P° PμPeC<sub>7</sub>C, C<sub>7</sub>P°PIP°C<sub>7</sub>PeC<sub>7</sub>P»C<sub>7</sub>C<sub>7</sub>PSPēPj PiC<sub>7</sub>PsC<sub>7</sub>C, PsC<sub>7</sub>P°PjPē.

P<sub>7</sub>PsC<sub>7</sub>PjP°P»CH<sub>7</sub>PSPēP<sub>7</sub> C-PjC<sub>7</sub>PSPsPiP»PsP±C<sub>7</sub>P»C-PS P»C<sub>7</sub>PrPēPSPē PjP°C"  
PiPμC<sub>7</sub>C-PsPr PSP°PiC-PIPIPēPIPμPrPμPSPSC<sub>7</sub> PiC<sub>7</sub>PēP±P»PēP·PSPs 40 PrPSC-PI.  
P<sub>7</sub>PμP<sub>7</sub> PiPμC<sub>7</sub>C-PsPr PSP°PiC-PIPIPēPIPμPrPμPSPSC<sub>7</sub> PjPsP<sub>7</sub>Pμ  
PIC-PrC<sub>7</sub>C-P·PSC<sub>7</sub>C, PēC<sub>7</sub>C<sub>7</sub> C<sub>7</sub> PePsP<sub>7</sub>PSPsPiPs PsPeC<sub>7</sub>PμPjPsPiPs PiP°C<sub>7</sub>C" PSC, P°,  
PsC<sub>7</sub>PsP±P»PēPIPs PiC<sub>7</sub>Pē PiPμC<sub>7</sub>PIPēPSPSPsPjC<sub>7</sub> C-PjC<sub>7</sub>PSPsPrPμC,, C-C<sub>7</sub>PēC, C-. IgG  
C, P° IgG-PePsPjPiP»PμPeC<sub>7</sub>Pē C<sub>7</sub>PsP·PiP°PrP°C<sub>7</sub>C, CH<sub>7</sub>C<sub>7</sub>C<sub>7</sub> C<sub>7</sub> PeP»C-C, PēPSP°C...  
C<sub>7</sub>PμC, PēPeC<sub>7</sub>P»PsPμPSPPrPsC, PμP»C-P°P»CH<sub>7</sub>PSPsC— C<sub>7</sub>PēC<sub>7</sub>C, PμPjPē.

P<sub>7</sub>P»C-PSC-C±PSPμ PrPsC<sub>7</sub>P»C-PrP<sub>7</sub>PμPSPSC<sub>7</sub> PsPeC<sub>7</sub>PμPjPēC... PiP°C<sub>7</sub>P°PjPμC, C<sub>7</sub>C-PI  
C,, P°C<sub>7</sub>PjP°PePsPeC-PSPμC, PēPePē PiC<sub>7</sub>PμPiP°C<sub>7</sub>P°C, C<sub>7</sub> P'C-PsPIPμPS  
PiC<sub>7</sub>PsPIP<sub>7</sub>PrPēP»PsC<sub>7</sub>CH<sub>7</sub> P·P° C<sub>7</sub>C±P°C<sub>7</sub>C, C<sub>7</sub> 22 PiP°C<sub>7</sub>C" PSC, C-PI. P<sub>7</sub> P<sub>7</sub>P<sub>7</sub>PeC<sub>7</sub>  
C<sub>7</sub>C, P°PSPsPIPēP»P° 19,94B±4,73 Pi/P», P<sub>7</sub> P<sub>7</sub>P<sub>7</sub>PeC<sub>7</sub> B<sub>7</sub>" 0,63 PiPsPrPēPSPē, AUC<sub>(0-t)</sub> B<sub>7</sub>"  
8309,60B±2631,49 Pi/PiPsPr/P». P'PjC-C<sub>7</sub>C, C-PjC<sub>7</sub>PSPsPiP»PsP±C<sub>7</sub>P»C-PSC<sub>7</sub> PI PiP»P°P·PjC-  
PeC<sub>7</sub>PsPIC- C<sub>7</sub>C, P°P±C-P»CH<sub>7</sub>PSPs C<sub>7</sub>C, C<sub>7</sub>PēPjC<sub>7</sub>PIP°PIC<sub>7</sub>C<sub>7</sub> PIPēC%Pμ  
PjC-PSC-PjP°P»CH<sub>7</sub>PSPsPiPs C<sub>7</sub>C-P»CH<sub>7</sub>PsPIP<sub>7</sub>PsPiPs C<sub>7</sub>C-PIPSC<sub>7</sub> 5 Pi/P» PiC<sub>7</sub>PsC, C<sub>7</sub>PiPsPj  
PiC<sub>7</sub>PēPSP°P<sub>7</sub>PjPSC- 28 PrC-P± PiC-C<sub>7</sub>P»C<sub>7</sub> PsPrPSPsC<sub>7</sub>P°P·PsPIP<sub>7</sub>PsPiPs PIPμPrPμPSPSC<sub>7</sub>  
PiC<sub>7</sub>PμPiP°C<sub>7</sub>P°C, C<sub>7</sub> P'C-PsPIPμPS.

### **P<sub>7</sub>P»C-PSC-C±PSC- C...P°C<sub>7</sub>P°PeC, PμC<sub>7</sub>PēC<sub>7</sub>C, PēPePē.**

#### **PμPsPeP°P·P°PSPSC<sub>7</sub>.**

P>C-PeP°C<sub>7</sub>C<sub>7</sub>CH<sub>7</sub>PePēP<sub>7</sub> P·P°C<sub>7</sub>C-P± P·P°C<sub>7</sub>C, PsC<sub>7</sub>PsPIC<sub>7</sub>PIP°C, Pē PrPsC<sub>7</sub>PsC<sub>7</sub>P»PēPj,  
PrC-C, C<sub>7</sub>Pj C, P° PiC-PrP»C-C, PeP°Pj PrP»C<sub>7</sub> P·P°PjC-C<sub>7</sub>PSPsC— C-PjC<sub>7</sub>PSPsC, PμC<sub>7</sub>P°PiC-C—  
C<sub>7</sub> PiC<sub>7</sub>PsC<sub>7</sub>PμC<sub>7</sub>C- P»C-PeC<sub>7</sub>PIP°PSPSC<sub>7</sub> PiPμC<sub>7</sub>PIPēPSPSPēC... C- PIC, PsC<sub>7</sub>PēPSPSPēC...  
C-PjC<sub>7</sub>PSPsPrPμC,, C-C<sub>7</sub>PēC, PSPēC... C<sub>7</sub>C, P°PSC-PI C- PiPsPI' C<sub>7</sub>P·P°PSPēC... P· PSPēPjPē  
P·P°C...PIP<sub>7</sub>C<sub>7</sub>CH<sub>7</sub>PIP°PSC<sub>7</sub>:

- CÍPëPSPPrCĤPsPjC-PI PìPµCĤPIPëPSPSPsPiPs C-PjCíPSPsPrPµC,,C-C†PëC,Cí:  
PICĤPsPrP¶PµPSP° P°PìP°PjPjP°PìP»PsP±CíP»C-PSPµPjC-CĬ P°P±Ps  
PìC-PìPsPìP°PjPjP°PìP»PsP±CíP»C-PSPµPjC-CĬ, C,CĬP¶PëPëPNë PePsPjP±C-PSPsPIP°PSPëPNë  
C-PjCíPSPsPrPµC,,C-C†PëC,, PSPµPëP»P°CÍPëC,,C-PePsPIP°PSPëPNë  
PIP°CĤC-P°P±PµP»CHPSPëPNë C-PjCíPSPsPrPµC,,C-C†PëC,, CÍPëPSPPrCĤPsPj P'C-CÍPëPsC,C,P°  
вĤ" PĥP»PrCĤPëC†P°;

- PIC,PsCĤPëPSPSPsPiPs CÍPëPSPPrCĤPsPjCí PrPµC,,C-C†PëC,Cí P°PSC,PëC,C-P»:  
C†PëC,PsPìPµPSC-C— CĤC-P·PSPsPiPs PìPµPSPµP·Cí (PìPsCÍC,CĤPëPNë C,P°  
C...CĤPsPSC-C†PSPëPNë P»PµPNëPePsP·, P°PìP»P°CÍC,PëC†PSP° P°PSPµPjC-CĬ, CÍC,P°PS  
PìC-CÍP»CĬ C,PµCĤP°PìC-C— C†PëC,PsCÍC,P°C,PëPëP°PjPë), C,CĬP¶PëC- C,,PsCĤPjPë  
P±P°PëC,PµCĤC-P°P»CHPSPs-C,PsPëCÍPëC†PSPëC... C,P° PIC-CĤCíCÍPSPëC...  
C-PSC,,PµPëC†C-PNë (PIPëP»CĤC†P°CĤC†Pë C...C-CĤCíCĤPìC-C†PSC-  
CíCÍPëP»P°PrPSPµPSPSCĬ, C%Ps CÍCíPìCĤPsPIPsPrP¶CíCĤC,CHCÍCĬ  
P±P°PëC,PµCĤC-C" PjC-C" CĤ C- CÍPµPìC,PëPëPs-PìC-C" PjC-C†PSPëPjPë CÍC,P°PSP°PjPë, C,P°  
CíCÍPëP»P°PrPSPµPSPSCĬ PìCĤPë PìC-PrPìPsC,PsPIC†C- C...C-CĤCíCĤPìC-C†PSPëC...  
C...PIPsCĤPëC... PrPs PsPìPµCĤP°C†C-C—);

- P°CíC,PsC-PjCíPSPSPëC... P·P°C...PIPsCĤCĤPIP°PSCĤ:  
C-PrC-PsPìP°C,PëC†PSP° C,CĤPsPjP±PsC†PëC,PsPìPµPSC-C†PSP° PìCíCĤPìCíCĤP° P·  
PIPëCÍPsPëPëPj CĤPëP·PëPëPsPj PeCĤPsPIPsC,PµC†C- P°P±Ps PìPµCĤPµPr  
C...C-CĤCíCĤPìC-C†PSPëPj PIC,CĤCíC†P°PSPSCĬPj вĤ" PrP»CĬ PePsCĤPµPëC†C-C—  
PëC-P»CHPëPsCÍC,C- C,CĤPsPjP±PsC†PëC,C-PI, CÍPëPSPPrCĤPsPj P"C-C"PSP° вĤ"  
P'P°CĤCĤPµ, C...CĤPsPSC-C†PSP° P·P°PìP°P»CHPSP° PSPµPNëCĤPsPìP°C,C-CĬ (C%Ps  
PrPµPjC-C" P»C-PSC-P·CíC"), P·P°PìP°P»CHPSP° PjC-PsPìP°C,C-CĬ,  
PìCĤP°PSCíP»PµPjP°C,PsP· P'PµPìPµPSPµCĤP°, PrPµCĤPjP°C,PsPjC-PsP·PëC,,  
CÍPëCÍC,PµPjPSC- P·P°C...PIPsCĤCĤPIP°PSPSCĬ CÍPìPsP»CíC†PSPsC—  
C,PëP°PSPëPSPë (CĤPµPIPjP°C,PsC—PrPSPëPNë P°CĤC,CĤPëC,), CÍPëPSPPrCĤPsPj  
PĤP°PIP°CÍP°PëC-;

- C,CĤP°PSCÍPìP»P°PSC,P°C†C-C— PëC-CÍC,PePsPIPsPiPs PjPsP·PëCí.

P—P°PjC-CÍPSP° C,PµCĤP°PìC-CĬ Cí PrPsCĤPsCÍP»PëC..., PrC-C,PµPNë C,P°  
PìC-PrP»C-C,PëC-PI (0 вĤ" 18 CĤPsPëC-PI) PìCĤPë:

- CÍPëPSPPrCĤPsPjP°C... PìPµCĤPIPëPSPSPsPiPs C-PjCíPSPsPrPµC,,C-C†PëC,Cí (PµP†P")  
P· PìPsCĤCíCëPµPSPSCĬPj PIPëCĤPsP±P»PµPSPSCĬ P°PSC,PëC,C-P»;

- PIC,PsCĤPëPSPSPëC... C-PjCíPSPsPrPµC,,C-C†PëC,P°C... (P'†P") Cí  
PìP°C†C-C" PSC,C-PI, CĬPëC- CÍC,CĤP°P¶PrP°CĤC,CH PIC-Pr C,CĬP¶PëPëC... P°P±Ps  
CĤPµC†PëPrPëPICíCĤC†PëC... C-PSC,,PµPëC†C-PNë, PSPµPµC,,PµPëC,PëPIPSPsPiPs  
PìCĤPsC,PëPjC-PëCĤPsP±PSPsPiPs P»C-PëCíPIP°PSPSCĬ, P°P±Ps Cí CĤP°P·C-, CĬPëC%Ps  
PrPsPIPµPrPµPSP° PSPµPrPsCÍC,P°C,PSC-CÍC,CH CÍPìPµC†PëC,,C-C†PSPëC... P°PSC,PëC,C-P»  
(P" P'P'Pĥ\*) P°P±Ps CĤC-PIPµPSCĤ IgG Cí CÍPëCĤPsPIP°C,C†C- <4 Pì/P».

\*P" P'P'Pĥ вĤ" PSPµCÍPìCĤPsPjPsP¶PSC-CÍC,CH PrPsCÍCĬPìPSPµPSPSCĬ  
PìCĤPëPSP°PNëPjPSC- PrPIPsPëCĤP°C,PSPsPiPs PìC-PrPIPëC%PµPSPSCĬ C,PëC,CĤCá IgG  
PìCĤPsC,Pë PìPSPµPIPjPsPëPsPëPsPIPsPiPs PìPsP»C-CÍP°C...P°CĤPëPrCá C,P° PIP°PëC†PëPS  
PìCĤPsC,Pë PìPsP»C-PìPµPìC,PëPrPSPëC... P°PSC,PëPìPµPSC-PI.

P—P°CÍC,PsCÍPsPICrPIP°C,Pë Cr CÍPeP»P°PrC- PePsPjPiP»PµPeCÍPSPsC— C,PµCĤP°PiC-C— PrPsCĤPsCÍP»PëC... PiP°C†C-C”PSC,C-PI P· C,CĬP¶PePsCĤ PiPSPµPIPjPsPSC-C”CĤ, CÍPiCĤPëC†PëPSPµPSPsCĤ PePsCĤPsPSP°PIC-CĤCrCÍPSPsCĤ C-PSC,,PµPeC†C-C”CĤ COVID-19 / SARS-CoV-2.

**PµCĤPsC,PëPiPsPeP°P·P°PSPSCĬ.**

P”C-PiPµCĤC†CrC,P»PëPIC-CÍC,CĤ PrPs P±CrPrCĤ-CĬPePsPiPs P· PePsPjPiPsPSPµPSC,C-PI PiCĤPµPiP°CĤP°C,Cr. P”C-PiPµCĤC†CrC,P»PëPIC-CÍC,CĤ PrPs PiPsPjPsP»PsPiC-C†PSPëC... C-PjCrPSPsPiP»PsP±CrP»C-PSC-PI, PsCÍPsP±P»PëPIPs Cr PrCrP¶Pµ CĤC-PrPeC-CÍPSPëC...B PIPëPiP°PrPeP°C... PrPµC,,C-C†PëC,Cr IgA, PePsP»Pë PiP°C†C-C”PSC, PjP°C” P°PSC,PëC,C-P»P° PrPs IgA. P’PIPµPrPµPSPSCĬ C-PjCrPSPsPiP»PsP±CrP»C-PSCr PiCĤPsC,PëPiPsPeP°P·P°PSPµ PsCÍPsP±P°Pj, CĬPeC- PjP°CĤC,CĤ PI P°PSP°PjPSPµP·C- C,CĬP¶PeC- P°P»PµCĤPiC-C†PSC- CĤPµP°PeC†C-C— PSP° PIPµPrPµPSPSCĬ P±C-P»PePsPiPëC... PiCĤPµPiP°CĤP°C,C-PI PeCĤPsPIC- P»CĤPrPëPSPë. PĬPIPSCĤPëPj, CĬPeC- CÍC,CĤP°P¶PrP°CĤC,CĤ PSP° P°P»PµCĤPiC-C†PSC- C...PIPsCĤPsP±Pë P°P±Ps PjP°CĤC,CĤ CÍC...PëP»CĤPSC-CÍC,CĤ PrPs P°P»PµCĤPiC-C†PSPëC... CĤPµP°PeC†C-PNë, PiCĤPë PIPµPrPµPSPSC- C-PjCrPSPsPiP»PsP±CrP»C-PSCr C,P° PI PSP°CÍC,CrPiPSC- 8 PrC-P± CĤPµPePsPjPµPSPPrCrCĤC,CĤCÍCĬ P°PSC,PëPiC-CÍC,P°PjC-PSPSC- P·P°CÍPsP±Pë. PĤCÍPsP±P°Pj, CĬPeC- CÍC,CĤP°P¶PrP°CĤC,CĤ PSP° C-PjCrPSPsPiP°C,PsP»PsPiC-C†PSC- CÍPëCÍC,PµPjPSC- P·P°C...PIPsCĤCĤPIP°PSPSCĬ (C-PjCrPSPSC- C...PIPsCĤPsP±Pë PeCĤPsPIC-, PePsP»P°PiPµPSPsP·, PSPµC,,CĤPëC,) PiCĤPµPiP°CĤP°C, CÍP»C-Pr PiCĤPëP·PSP°C†P°C,Pë PiC-CÍP»CĬ PePsPSCÍCrP»CĤC,P°C†C-C— P· PIC-PrPiPsPIC-PrPSPëPj CÍPiPµC†C-P°P»C-CÍC,PsPj. Pj PiPµCĤC-PsPr P·P°PiPsCÍC,CĤPµPSPSCĬ P°P»PµCĤPiC-C†PSPsPiPs PiCĤPsC†PµCÍCr PIPµPrPµPSPSCĬ PiCĤPµPiP°CĤP°C,Cr PiCĤPsPiPsPrPëC,Pë PiC-CÍP»CĬ PIPëCÍPSPsPIPeCÍ P°P»PµCĤPiPsP»PsPiP° P·P° P¶PëC,C,C”PIPëPjPë PiPsPeP°P·P°PSPSCĬPjPë.

**PĤCÍPsP±P»PëPIC- P·P°C...PsPrPë P±PµP·PiPµPePë.**

P”PµCĬPeC- CÍPµCĤPNëPsP·PSC- PiPsP±C-C†PSC- CĤPµP°PeC†C-C— PjPsP¶CrC,CĤ P±CrC,Pë PiPsPiBĤ™ CĬP·P°PSC- P·C- CëPIPëPrPeC-CÍC,CĤ PIPµPrPµPSPSCĬB PiCĤPµPiP°CĤP°C,Cr. PµP°C†C-C”PSC,Pë, CĬPeC- PsC,CĤPëPjCrCĤC,CĤ C-PjCrPSPsPiP»PsP±CrP»C-PS PIPµCĤCëPµ, P·P°P·PIPëC†P°PNë PIC-PrC†CrPIP°CĤC,CĤ CÍP»P°P±PeCÍ PiPsP±C-C†PSCr PrC-CĤ P· P±C-P»CĤCëPsCĤ C†P°CÍC,PsC,PsCĤ PSC-P¶ C,C-, C...C,Ps P·PSP°C...PsPrCĬC,CĤCÍCĬ PSP° CĤPµPiC†P»CĬCĤPSC-PNë C,PµCĤP°PiC-C— C-PjCrPSPsPiP»PsP±CrP»C-PSPsPj. P’PeP°P·P°PSPëC... PSPëP¶C†Pµ PiP°CĤP°PjPµC,CĤC-PI CëPIPëPrPePsCÍC,C- PIPµPrPµPSPSCĬ CÍP»C-Pr PrPsC,CĤPëPjCrPIP°C,PëCÍCĬ, C- P·P° PiP°C†C-C”PSC,P°PjPë PSPµPsP±C...C-PrPSPs CĤPµC,PµP»CĤPSPs CÍPiPsCÍC,PµCĤC-PiP°C,Pë CĬPe PiC-Pr C†P°CÍ C-PSC,,CrP·C-C—, C,P°Pe C- PiCĤPsC,CĬPiPsPj 1 PiPsPrPëPSPë PiC-CÍP»CĬ P·P°PIPµCĤCëPµPSPSCĬ PiPµCĤCëPsC— C-PSC,,CrP·C-C—. Pj CĤP°P·C- PiPsCĬPIPë PiPsP±C-C†PSPëC... CĤPµP°PeC†C-PNë CëPIPëPrPeC-CÍC,CĤ C-PSC,,CrP·C-C— PiPsC,CĤC-P±PSPs P·PSPëP·PëC,Pë P°P±Ps PiCĤPëPiPëPSPëC,Pë PIPµPrPµPSPSCĬ PiCĤPµPiP°CĤP°C,Cr PrPs P·PSPëPePSPµPSPSCĬ PSPµP±P°P¶P°PSPëC... CÍPëPjPiC,PsPjC-PI. PiPeC%oPs PiC-CÍP»CĬ PiCĤPëPiPëPSPµPSPSCĬ PIPµPrPµPSPSCĬ CÍPëPjPiC,PsPjPë P·P±PµCĤC-PiP°CĤC,CĤCÍCĬ, C,Ps PrPsC†C-P»CĤPSP° CÍPëPjPiC,PsPjP°C,PëC†PSP°







PrPμC,,C-C†PëC,PsPj C-PjC†PSPsPiP»PsP±C†P»C-PSC† Pḥ C,P° PSP°C†PIPIPSPëPjPë  
P°PSC,PëC,C-P»P°PjPë PrPs C-PjC†PSPsPiP»PsP±C†P»C-PSC† Pḥ C-C†PSC†C” P·PSP°C†PSPëPNë  
CḥPëP·PëPe CḥPsP·PIPëC,PeC† C†PμCḥPNëPsP·PSPëC... P°P»PμCḥPiC-C†PSPëC... C,P°  
P°PSP°C,,C-P»P°PeC,PsC—PrPSPëC... CḥPμP°PeC†C-PNë, C†PeC- PjPsP¶C†C,CH  
PIPëPSPëPePSC†C,Pë C† P·PIBḥ™ C†P·PeC† P·PIPIPμPrPμPSPSC†Pj PiCḥPμPiP°CḥP°C,C†  
P°C-PsPIPμPS.

PJ CḥC-PrPeC-C†PSPëC... PIPëPiP°PrPeP°C... C-PjC†PSPsPiP»PsP±C†P»C-PS P»CḥPrPëPSPë  
PSPsCḥPjP°P»CḥPSPëPNë PjPsP¶Pμ C†PiCḥPëC†PëPSC†C,Pë P·PSPëP¶PμPSPSC†  
P°CḥC,PμCḥC-P°P»CḥPSPsPiPs C,PëC†PeC† P·P°PSP°C,,C-P»P°PeC,PëC†PSPsCḥ  
CḥPμP°PeC†C-C”Cḥ, PSP°PIC-C,CH C† PiP°C†C-C”PSC,C-PI, C†PeC- PsC,CḥPëPjC†PIP°P»Pë  
PiPsPiPμCḥPμPrPSC” P»C-PeC†PIP°PSPSC† C-PjC†PSPsPiP»PsP±C†P»C-PSPsPj P»CḥPrPëPSPë  
PSPsCḥPjP°P»CḥPSPëPj.

*PkPëCḥPePsPIP° PSPμPrPsC†C,P°C,PSC-C†C,CH*

PJ PiP°C†C-C”PSC,C-PI, C†PeC- PiCḥPsC...PsPrPëP»Pë C,PμCḥP°PiC-Cḥ IgG,  
P±C†P»Pë PIPëPiP°PrPePë PiPsC†C,CḥPsC— PSPëCḥPePsPIPsC— PSPμPrPsC†C,P°C,PSPsC†C,C-,  
C%Ps PIPëP»CḥC†P°P»Pë PiPsC†C,CḥC† PSPëCḥPePsPIC† PSPμPrPsC†C,P°C,PSC-C†C,CH,  
PiPsC†C,CḥPëPNë C,C†P±C†P»C†CḥPSPëPNë PSPμPeCḥPsP·, PiCḥPsPeC†PëPjP°P»CḥPSC†  
C,C†P±C†P»C†CḥPSC† PSPμC,,CḥPsPiP°C,C-Cḥ C- PsC†PjPsC,PëC†PSPëPNë PSPμC,,CḥPsP· PJ  
P±C-P»CḥC€PsC†C,C- PIPëPiP°PrPeC-PI P±C†P»Pë PIPëP·PSP°C†PμPSC- C,,P°PeC,PsCḥPë  
CḥPëP·PëPeC†, C,P°PeC- C†Pe PiPsPiPμCḥPμPrPSCḥPs C-C†PSC†CḥC†P° PSPëCḥPePsPIP°  
PSPμPrPsC†C,P°C,PSC-C†C,CH, C†C†PeCḥPsPIPëPNë PrC-P°P±PμC,, PiC-PiPsPIPsP»PμPjC-C†,  
PSP°PrPjC-CḥPSP° PjP°C†P° C,C-P»P°, C†C†PiC†C,PSC- PSPμC,,CḥPsC,PsPeC†PëC†PSC-  
P»C-PeP°CḥC†CḥPeC- PiCḥPμPiP°CḥP°C,Pë, PIC-Pe PiP°C†C-C”PSC,P° PIC-Pr 65 CḥPsPeC-PI,  
C†PμPiC†PëC† P°P±Ps PiP°CḥP°PiCḥPsC,PμC—PSPμPjC-C†.

PμPsPIC-PrPsPjP»PμPSPSC† PiCḥPs PSPëCḥPePsPIC† PrPëC†C,,C†PSPeC†C-Cḥ C- PiPsC†C,CḥC†  
PSPëCḥPePsPIC† PSPμPrPsC†C,P°C,PSC-C†C,CH P±C†P»Pë PiPsPIBḥ™ C†P·P°PSC- C-P·  
PIPëPePsCḥPëC†C,P°PSPSC†Pj P±P°PiP°C,CHPsC... P»C-C†PμPSP·PsPIP°PSPëC...  
PiCḥPμPiP°CḥP°C,C-PI IgG, C%Ps PjC-C†C,C†C,CH CḥC-P·PSC- PrPsPiPsPjC-P¶PSC-  
CḥPμC†PsPIPëPSPë, C,P°PeC- C†Pe C†P°C...P°CḥPsP·P°, PiP»CḥPePsP·P° C,P°  
PjP°P»CḥC,PsP·P°. PhC†PsP±P»PëPIPs PIPμP»PëPeP° C†P°C†C,PeP° PIC-Pr  
P·P°PiP°P»CḥPSPsC— PeC-P»CḥPePsC†C,C- C†C,PsC†C†C”C,CHC†C† PiCḥPμPiP°CḥP°C,C-PI,  
C%Ps PjC-C†C,C†C,CH C†P°C...P°CḥPsP·C† C†Pe C†C,P°P±C-P»C-P·P°C,PsCḥ. P”P»C†  
PiP°C†C-C”PSC,C-PI P· PiC-PrPIPëC%PμPSPëPj CḥPëP·PëPePsPj PjPsP¶PSP°  
CḥPsP·PiP»C†PSC†C,Pë PjPsP¶P»PëPIC-C†C,CH PIPëPePsCḥPëC†C,P°PSPSC†  
PiCḥPμPiP°CḥP°C,C-PI IgG, C†PeC- PSPμ PjC-C†C,C†C,CH PIPëC%PμP·P°P·PSP°C†PμPSPëC...  
PrPsPiPsPjC-P¶PSPëC... CḥPμC†PsPIPëPS.

PμPμCḥPμPr PiPsC†P°C,PePsPj PIPμPrPμPSPSC† PiCḥPμPiP°CḥP°C,C† P°C-PsPIPμPS  
C€P»C†C...PsPj C-PSC,,C†P·C-C— C†P»C-Pr PiPμCḥPμPePsPSP°C,PëC†C†, C%Ps C†  
PiP°C†C-C”PSC,P° PIC-PrC†C†C,PSC- PsP·PSP°PePë PrPμPiC-PrCḥP°C,P°C†C-C—.

P”P»C† PiP°C†C-C”PSC,C-PI P· PiPsC,PμPSC†C-PNëPSPëPj CḥPëP·PëPePsPj CḥPsP·PIPëC,PeC†  
PiPsC†C,CḥPsC— PSPëCḥPePsPIPsC— PSPμPrPsC†C,P°C,PSPsC†C,C- C†P»C-Pr  
P·PrC-PNëC†PSCḥPIP°C,Pë PiPμCḥC-PsPrPëC†PSPëPNë PjPsPSC-C,PsCḥPëPSPi C,,C†PSPeC†C-C—  
PSPëCḥPsPe C,P° PrC-C†CḥPμP·C†. PμPsPeP°P·PSPëPePë C,,C†PSPeC†C-C— PSPëCḥPsPe,  
PIPëP»CḥC†P°CḥC†Pë CḥC-PIPμPSCḥ P°P·PsC,C† C†PμC†PsPIPëPSPë PeCḥPsPIC-  
(PḥPŸPḥ)/PeCḥPμP°C,PëPSC-PSC† C†PëCḥPsPIP°C,PePë PeCḥPsPIC-, C†P»C-Pr  
PsC†C-PSCḥPIP°C,Pë PrPs PiPμCḥC€PsPiPs PIPμPrPμPSPSC† PiCḥPμPiP°CḥP°C,C†

P'C-PsPIPμPS C,P° PiC-CÍP»CÍ C†CHbPsPiPs C‡PμCḡPμP· PiPμPIPSC- PiCḡPsPjC-P¶PePë C‡P°CÍCr. PμCḡPë PiPsPiC-CḡC€PμPSPSC- C,,CÍPSPeC†C-PsPSCrPIP°PSPSCÍ PSpëCḡPsPe CÍP»C-Pr PiCḡPëPiPëPSPëC,Pë P·P°CÍC,PsCÍCrPIP°PSPSCÍ PiCḡPμPiP°CḡP°C,Cr.

P"»CÍ PiP°C†C-C"PS C,C-PI P· PiPsC,PμPSC†C-PNëPSPëPj CḡPëP·PëPePsPj CḡPsP·PIPëC,PeCr PiPsCḡCrC€PμPSPSCÍ C,,CÍPSPeC†C-PsPSCrPIP°PSPSCÍ PSpëCḡPsPe C,P°/P°P±Ps CḡPsP·PIPëC,PeCr C,CḡPsPjP±PsC,PëC‡PSPëC... CrCÍPeP»P°PrPSPμPSCḡ CÍP»C-Pr PsP±PμCḡPμP¶PSPs P·PjPμPSC€CÍPIP°C,Pë PeC-P»CHbPeC-CÍC,CH PiCḡPμPiP°CḡP°C,Cr P'C-PsPIPμPS, PIPIPμPrPμPSPsPiPs P·P° PsPrPëPSPëC†Cḡ C‡P°CÍCr.

*P"C-PiPμCḡPiCḡPsC,PμC—PSPμPjC-CÍ*

P"C-PiPμCḡPiCḡPsC,PμC—PSPμPjC-CÍ, PiC-PrPIPëC%PμPSPSCÍ PiBḡ™ CÍP·PePsCÍC,C- CÍPëCḡPsPIP°C,PePë PeCḡPsPIC- C,P° PiC-PiPsPSP°C,CḡC-C"jC-CÍ PjPsP¶CÍCr,CH PIPëPSPëPePSCrC,Pë Cr PiP°C†C-C"PS C,C-PI, CÍPeC- PsC,CḡPëPjC†CḡC,CH P»C-PeCrPIP°PSPSCÍ C-PjCrPSPsPiP»PsP±CÍP»C-PSPsPj. P"C-PiPsPSP°C,CḡC-C"jC-CÍ PjPsP¶Pμ PIPëCÍPIPëC,PëCÍCÍ PiCÍPμPIPrPsPiC-PiPsPSP°C,CḡC-C"jC-C"ḡC, C%Ps PiCḡPsCÍPIP»CÍC" C,CHCÍCÍ P·PjPμPSC€PμPSPsCḡ PsP±C‡PëCÍP»PμPSPsCḡ PsCÍPjPsP»CÍP»CHbPSC-CÍC,Cḡ PiP»P°P·PjPë P°P±Ps P·P±C-P»CHbC€PμPSPSCÍPj PsCÍPjPsP»CÍCḡPSPsPiPs C-PSC,PμCḡPIP°P»Cr. PḡP»C-PSC-C‡PSPs PIP°P¶P»PëPIPs PIC-PrCḡC-P·PSPëC,Pë CÍPiCḡP°PIP¶PSCḡ PiC-PiPsPSP°C,CḡC-C"jC-Cḡ PIC-Pr PiCÍPμPIPrPsPiC-PiPsPSP°C,CḡC-C"jC-C—, PsCÍPeC-P»CHbPePë PiCḡPë P·PjPμPSC€PμPSPSC- PIC-P»CHbPSPsC— PIPsPrPë Cr CÍPëCḡPsPIP°C,C†C- PeCḡPsPIC- C†C-P»CHbPsPIPμ P»C-PeCrPIP°PSPSCÍ PiP°C†C-C"PS C,C-PI C-P· PiCÍPμPIPrPsPiC-PiPsPSP°C,CḡC-C"jC-C"ḡC PjPsP¶Pμ PiCḡPëP·PIPμCÍC,Pë PrPs PrPμPiC-PrCḡP°C,P°C†C-C—, Cr P·PiBḡ™ CÍP·PeCr P· C‡PëPj PiC-PrPIPëC%CrC" C,CHCÍCÍ PiBḡ™ CÍP·PeC-CÍC,CH CÍPëCḡPsPIP°C,PePë PeCḡPsPIC- C,P° PjPsP¶Pμ PIPëPSPëPePSCrC,Pë C,CḡPsPjP±PsPμPjP±PsP»C-C‡PSPμ CrCÍPeP»P°PrPSPμPSPSCÍ.

*PḡCḡPsPjP±PsPμPjP±PsP»C-C‡PSC- C‡CÍPeP»P°PrPSPμPSPSCÍ*

P'PSP°CÍP»C-PrPsPe P»C-PeCrPIP°PSPSCÍ PiCḡPμPiP°CḡP°C,P°PjPë C-PjCrPSPsPiP»PsP±CÍP»C-PSCr PjPsP¶Pμ PIPëPSPëPePSCrC,Pë C,CḡPsPjP±PsP· PαP°PeC,PsCḡPë CḡPëP·PëPeCr: PsP¶PëCḡC-PSPSCÍ, P°C,PμCḡPsCÍPeP»PμCḡPsP· PI P°PSP°PjPSPμP·C-, PiPsCḡCrC€PμPSPSCÍ CÍPμCḡC†PμPIPsPiPs PIPëPePëPrCr, P°CḡC,PμCḡC-P°P»CHbPSP° PiC-PiPμCḡC,PμPSP·C-CÍ, C†CrPeCḡPsPIPëPNë PrC-P°P±PμC, P·PSP°CÍPIPSC-CÍC,Cḡ PI P°PSP°PjPSPμP·C- P·P°C...PIPsCḡCḡPIP°PSPSCÍ CÍCrPrPëPS C- PIPëPiP°PrPeC-PI C,CḡPsPjP±PsP·Cr, PSP°P±CÍC,P° P°P±Ps CÍPiP°PrPePsPIP° C,CḡPsPjP±PsC,,C-P»C-CÍ, C,CÍP¶PeP° PiC-PiPsPIPsP»PμPjC-CÍ, P·P°C...PIPsCḡCḡPIP°PSPSCÍ, CÍPeC- PiC-PrPIPëC%CrCḡC,CH PiBḡ™ CÍP·PeC-CÍC,CH PeCḡPsPIC-, P»C-C,PSC-PNë PIC-Pe, C,CḡPëPIP°P»P° C-PjPjPsP±C-P»C-P·P°C†C-CÍ, CÍC,P°PSPë PiC-PiPμCḡPePsP°PiCÍP»CÍC†C-C—, PIPμPSPsP·PSPëPNë P°P±Ps P°CḡC,PμCḡC-P°P»CHbPSPëPNë C,CḡPsPjP±PsP· PI P°PSP°PjPSPμP·C-, P·P°CÍC,PsCÍCrPIP°PSPSCÍ PμCÍC,CḡPsPiPμPSC-PI, PIPëPePsCḡPëCÍC,P°PSPSCÍ PiPsCÍC,C-PNëPSPëC... C†PμPSC,CḡP°P»CHbPSPëC... PeP°C,PμC,PμCḡC-PI Cr CÍCrPrPëPSP°C..., PiC-PrPIPëC%PμPSP° PiBḡ™ CÍP·PeC-CÍC,CH PeCḡPsPIC- C,P° CḡPëP·PëPe CÍPμCḡC†PμPIPs-CÍCrPrPëPSPSPëC... P·P°C...PIPsCḡCḡPIP°PSCḡ. PḡCḡPsPjP±PsP· C,P°PePsP¶ PjPsP¶Pμ PIPëPSPëPePSCrC,Pë PSP°PIC-C,CH Cr CḡP°P·C- PIC-PrCÍCrC,PSPCÍC,C- PIC-PrPsPjPëC... C,,P°PeC,PsCḡC-PI CḡPëP·PëPeCr.

PḡP»C-Pr P·PrC-PNëCÍPSPëC,Pë P·P°PiP°P»CHbPSCr PsC†C-PSPeCr PiBḡ™ CÍP·PePsCÍC,C- PeCḡPsPIC- Cr PiP°C†C-C"PS C,C-PI P· CḡPëP·PëPePsPj PiC-PrPIPëC%PμPSPsC— PiBḡ™ CÍP·PePsCÍC,C-, PIPeP»CḡC‡P°CḡC‡Pë PiPsPiBḡ™ CÍP·P°PSCr P·

PeC7C-PsPiP»PsP±CfP»C-PSP°PjPë, C...C-P»PsPjC-PeC7PsPSPµPjC-C"CH  
PiPsP»PsPrCfPIP°PSPSCII/ PiPsPjC-C,PSPs PIPëCÍPsPePëPj C7C-PIPSµPj  
C,C7PëPiP»C-C†PµC7PsP»C-PI (C,C7PëPiP»C-C†PµC7PëPrC-PI) P°P±Ps  
PjPsPSPsPeP»PsPSP°P»CHPSPsC7 PiP°PjPsPiP°C,C-C"CH. P"»CII PiP°C†C-C"PSC,C-PI P·  
C7PëP·PëPePsPj PIPëPSPëPePSPµPSPSCII C,C7PsPjP±PsP·Cf PiC7P°PeC,PëPeCfC"C,CHCÍCII  
PIPIµPrPµPSPSCII PiC7PµPiP°C7P°C,C-PI C-PjCfPSPsPiP»PsP±CfP»C-PSCf Cf  
PjC-PSC-PjP°P»CHPSPëC... PrPsP·P°C... C,P° P· PjC-PSC-PjP°P»CHPSPsC7  
C€PIPëPrPeC-CÍC,C7 C-PSC,,CfP·C-C—. PµPµC7PµPr P·P°CÍC,PsCÍCfPIP°PSPSCII Pj  
PiC7PµPiP°C7P°C,Cf CÍP»C-Pr PiPµC7PµPePsPSP°C,PëCÍCII Cf PSP°P»PµP¶PSPsPjCf  
C7C-PIPS- PiC-PrC7P°C,P°C†C-C— PiP°C†C-C"PSC,P°. Pj PiP°C†C-C"PSC,C-PI P·  
C7PëP·PëPePsPj PIPëPSPëPePSPµPSPSCII PiC-PrPIPëC%µPµPSPsC— Pιβ7™ CII·PePsCÍC,C-  
CÍP»C-Pr P·PrC-PMëCÍPSC7PIP°C,Pë PePsPSC,C7PsP»CH CÍPëPjPiC,PsPjC-PI C,C7PsPjP±PsP·Cf  
C,P° PsC†C-PSPeCf Pιβ7™ CII·PePsCÍC,C- PeC7PsPIC-.

*PÿPëPSPrC7PsPj P°CÍPµPiC,PëC±PSPsPiPs PjPµPSC-PSPiC-C,Cá*

PİPe PiPsPIC-PrPsPjP»CII»PsCÍCII, CÍPëPSPrC7PsPj P°CÍPµPiC,PëC±PSPsPiPs  
PjPµPSC-PSPiC-C,Cf (PÿP7P7) PjPsP¶Pµ C7C-PrPePs PIPëPSPëPeP°C,Pë Cf P·Pιβ7™ CII·PeCf P·  
P»C-PeCfPIP°PSPSCII Pj PiC7PµPiP°C7P°C,P°PjPë C-PjCfPSPsPiP»PsP±CfP»C-PSCf.  
PµC7PëPiPëPSPµPSPSCII P»C-PeCfPIP°PSPSCII C,P°PePëPjPë PiC7PµPiP°C7P°C,P°PjPë  
CÍPiC7PëCII C" C7PµPjC-CÍC-C— PÿP7P7 P±PµP· CfCÍPeP»P°PrPSPµPSC7 PiC7PsC,CII PiPsPj  
PeC-P»CHPePsC... PrPSC-PI. PiPµPMë CÍPëPSPrC7PsPj P·P°P·PIPëC±P°PMë  
P·ιβ7™ CIIPIP»CII C,CHCÍCII PiC7PsC,CII PiPsPj PiPµC7C-PsPrCf PIC-Pr PeC-P»CHPePsC...  
PiPsPrPëPS PrPs PrPIPsC... PrPSC-PI PiC-CÍP»CII P»C-PeCfPIP°PSPSCII  
PiC7PµPiP°C7P°C,P°PjPë C-PjCfPSPsPiP»PsP±CfP»C-PSCf C,P° C—C... C€PIPëPrPePsPiPs  
PIPIµPrPµPSPSCII. PiPµ C...P°C7P°PeC,PµC7PëP·CfC"C,CHCÍCII CÍPëPjPiC,PsPjP°PjPë, C%µPs  
PIPeP»CHC±P°C7C,CH CÍPëP»CHPSPëPMë PiPsP»PsPIPSPëPMë P±C-P»CH,  
C7PëPiC-PrPSC-CÍC,CH Pjιβ7™ CII·C-PI PiPsC,PëP»PëC†C-, CÍPsPSP»PëPIC-CÍC,CH,  
PiP°C7CII C±PeCf, C,,PsC,PsC,,PsP±C-C7, P±PsP»CHPsPIC- PIC-PrC†CfC,C,CII PiC-Pr C±P°CÍ  
C7CfC...Cf PsC±PµPMë, PSCfPrPsC,Cf C,P° P±P»CHPIP°PSPSCII. P PµP·CfP»CHC,P°C,Pë  
PrPsCÍP»C-PrP¶PµPSC7 C†PµC7PµP±C7PsCÍPiC-PSP°P»CHPSPsC— C7C-PrPëPSPë (PiPÿP )  
C±P°CÍC,Ps C" PiPsP·PëC,PëPIPSPëPjPë PSP° PiP»PµPsC†PëC,PsP· P· PeC-P»CHPePsPjP°  
C,PëCÍCII C±P°PjPë PeP»C-C,PëPS PSP° 1 PjPj³, PiPµC7PµPIP°P¶PSPs  
PiC7P°PSCfP»PsC†PëC,P°C7PSPsPiPs C7CII PrCf, C,P° PiC-PrPIPëC%µPµPSPSCII C7C-PIPS-PI  
P±C-P»PeC-PI PrPs PeC-P»CHPePsC... CÍPsC,PµPSC7 PjPi/PrP». PµP°C†C-C"PSC,Pë, Cf  
CII PePëC... PSP°CIIPIPS- C,P°PeC- CÍPëPjPiC,PsPjPë, PiPsPIPëPSPSC- PiC7PsPMëC,Pë  
PSPµPIC7PsP»PsPiC-C†PSPµ PsP±CÍC,PµP¶PµPSPSCII, PIPeP»CHC±P°C7C±Pë  
PrPsCÍP»C-PrP¶PµPSPSCII PiPÿP , PrP»CII PIPëPeP»CHC±PµPSPSCII C-PSC€PëC...  
PiC7PëC±PëPS PjPµPSC-PSPiC-C,Cf. PµP°C†C-C"PSC,Pë, CII PeC- PjP°C7C,CH PI  
P°PSP°PjPSPµP·C- PjC-PiC7PµPSC7, C" P±C-P»CHC€ CÍC...PëP»CHPSPëPjPë PrPs  
PSC7PsPiPs. PÿPëPSPrC7PsPj PjPµPSC-PSPiC-C,PSPsPiPs CÍPµPiCÍPëCÍCf PjPsP¶Pµ  
C,C7P°PiP»CII,C,PëCÍCII C±P°CÍC,C-C€Pµ PiC7Pë P»C-PeCfPIP°PSPSC- PIPëCÍPsPePëPjPë  
PrPsP·P°PjPë IgG.

*P"µPjPsP»C-P·*

PµC7PµPiP°C7P°C,Pë C-PjCfPSPsPiP»PsP±CfP»C-PSCf PjPsP¶CfC,CH PjC-CÍC,PëC,Pë  
P°PSC,PëC,C-P»P° PiC7CfPi PeC7PsPIC-, C%µPs PjPsP¶CfC,CH PrC-CII,C,Pë CII Pe  
PiPµPjPsP»C-P·PëPSPë C,P° CÍPiC7PëCII,C,Pë *in vivo* PiPsPeC7PëC,C,C7  
PµC7PëC,C7PsC†PëC,C-PI PsP±PsP»PsPSPePsC7 P· C-PjCfPSPsPiP»PsP±CfP»C-PSCf, C%µPs  
CÍPiC7PëC±PëPSCII C" PiC7CII PjCf PiPsP·PëC,PëPIPSCf C7PµP°PeC†C-C7  
C-PjCfPSPsPiP»PsP±CfP»C-PSCf C,P° P·C7C-PrPeP° PiPµPjPsP»C-P·. P"µPjPsP»C-C,PëC±PSP°

P°PSPμPjC-CΠ PjPsP¶Pμ PIPëPSPëPePSCrC,Pë Cr P·PIBḡ™ CΠP·PeCr P· P»C-PeCrPIP°PSPSCΠPj C-PjCrPSPsPiP»PsP±CrP»C-PSP°PjPë, PIPSP°CΓP»C-PrPsPe P·P±C-P»CHCεPμPSPSCΠ CΓPμPePIPμCΓC,CḡP°C†C-C— PμCḡPëC,CḡPsC†PëC,C-PI. PμP°C†C-C”PSC,C-PI, CΠPeC-PsC,CḡPëPjCrCḡC,CH P»C-PeCrPIP°PSPSCΠ C-PjCrPSPsPiP»PsP±CrP»C-PSP°PjPë, CΓP»C-Pr PePsPSC,CḡPsP»CḡPIP°C,Pë PSP° PSP°CΠPIPSC-CΓC,CH PeP»C-PSC-C†PSPëC... CΓPëPjPiC,PsPjC-PI PiPμPjPsP»C-P·Cr. PμCḡPë PiPsCΠPIC- C,P°PePëC... CΓPëPjPiC,PsPjC-PI PiC-CΓP»CΠ PIPμPrPμPSPSCΠ C-PjCrPSPsPiP»PsP±CrP»C-PSCr CεP»CΠC...PsPj C-PSC,,CΓP·C-C— CΓP»C-Pr P·PrC-PNëCΓPSPëC,Pë P»P°P±PsCḡP°C,PsCḡPSC- P°PSP°P»C-P·Pë PrP»CΠ PiC-PrC,PIPμCḡPrP¶PμPSPSCΠ PiPμPjPsP»C-P·Cr.

*PŸPëPSPrCḡPsPj PiPsCΓC,CḡPsPiPs PiPsCΓC,C,CḡP°PSCΓC,,CzP·C-PNëPSPsPiPs CzCεPePsPrP¶PμPSPSCΠ P»PμPiPμPSCḡ*

PμPsPIC-PrPsPjP»CΠP»PsCΓCΠ PiCḡPs PSPμPeP°CḡPrC-PsPiPμPSPSPëPNë PSP°P±CḡCΠPe P»PμPiPμPSCḡ (CΓPëPSPrCḡPsPj PiPsCΓC,CḡPsPiPs PiPsCΓC,C,CḡP°PSCΓC,,CΓP·C-PNëPSPsPiPs CrCεPePsPrP¶PμPSPSCΠ P»PμPiPμPSCḡ (PŸP“PμPjP»)) Cr PiP°C†C-C”PSC,C-PI, CΠPePëPj PIPsPrPëP»Pë C-PjCrPSPsPiP»PsP±CrP»C-PS. PŸP“PμPjP» C...P°CḡP°PeC,PμCḡPëP·CrC”C,CHCΓCΠ C,CΠP¶PePëPj CrCΓPeP»P°PrPSPμPSPSCΠPj PrPëC...P°PSPSCΠ, PSP°P±CḡCΠPePsPj P»PμPiPμPSCḡ, PiC-PiPsPeCΓPμPjC-C”Cḡ, PSPsCḡPjP°P»CHPSPsCḡ C,,CΓPSPeC†C-C”Cḡ P»C-PIPsPiPs CεP»CΓPSPsC†PeP° C,P° PiP°CḡCΠC†PePsCḡ, C%Ps P·P°P·PIPëC†P°PNë PIPëPSPëPeP°C” PiCḡPsC,CΠPiPsPj 1Bḡ“6 PiPsPrPëPS PiC-CΓP»CΠ C,CḡP°PSCΓC,,CΓP·C-C—. PμP°C†C-C”PSC,P°Pj P·C- PŸP“PμPjP» PjPsP¶PSP° P·P°CΓC,PsCΓPsPICrPIP°C,Pë PePëCΓPSPμPICr C,PμCḡP°PiC-Cḡ P· PSP°P»PμP¶PSPsCḡ PrPsPrP°C,PePsPiPsCḡ PIPμPSC,PëP»CΠC†C-C”Cḡ P»PμPiPμPSCḡ.

PμP°C†C-C”PSC,C-PI, CΠPeC- PiCḡPëPNëPjP°CḡC,CH C-PjCrPSPsPiP»PsP±CrP»C-PS, CΓP»C-Pr PePsPSC,CḡPsP»CḡPIP°C,Pë C%PsPrPs PiPsP±C-C†PSPëC... CḡPμP°PeC†C-PNë P· P±PsPeCr PrPëC...P°P»CHPSPsC— CΓPëCΓC,PμPjPë. PiPeC%Ps PiC-PrPsP·CḡCḡC”C,CHCΓCΠ PSP°CΠPIPSC-CΓC,CH PŸP“PμPjP», PSPμPsP±C...C-PrPSPs PiCḡPsPIPμCΓC,Pë PIC-PrPiPsPIC-PrPSC- P°PSP°P»C-P·Pë PSP° PSP°CΠPIPSC-CΓC,CH P°PSC,PëPSPμPNëC,CḡPsC,,C-P»CHPSPëC... P°PSC,PëC,C-P» CΠPe Cr PiCḡPμPiP°CḡP°C,C-, C,P°Pe C- PI CΓPëCḡPsPIP°C,C†C- PeCḡPsPIC- PiP°C†C-C”PSC,P°.

*P»P°P±PsCḡP°C,PsCḡPSC- PrPsCΓP»C-PrP¶PμPSPSCΠ*

P—P° PiPsCΠPIPë CΓPëPjPiC,PsPjC-PI PiPμPjPsP»C-P·Cr PiC-CΓP»CΠ PIPμPrPμPSPSCΠ C-PjCrPSPsPiP»PsP±CrP»C-PSCr CεP»CΠC...PsPj C-PSC,,CΓP·C-C— CΓP»C-Pr PiCḡPsPIPμCΓC,Pë PIC-PrPiPsPIC-PrPSC- P»P°P±PsCḡP°C,PsCḡPSC- P°PSP°P»C-P·Pë PrP»CΠ C—C... PiC-PrC,PIPμCḡPrP¶PμPSPSCΠ.

PiPeC%Ps C” PiC-PrPsP·CḡPë CΓC,PsCΓPsPIPSPs PŸP“PμPjP», C,Ps CΓP»C-Pr PIPëPePsPSP°C,Pë PIC-PrPiPsPIC-PrPSC- P°PSP°P»C-P·Pë PSP° PSP°CΠPIPSC-CΓC,CH P°PSC,PëPSPμPNëC,CḡPsC,,C-P»CHPSPëC... P°PSC,PëC,C-P» CΠPe Cr PiCḡPμPiP°CḡP°C,C-, C,P°Pe C- PI CΓPëCḡPsPIP°C,C†C- PeCḡPsPIC- PiP°C†C-C”PSC,P°.

Pj P·PIBḡ™ CΠP·PeCr P· PiPsC,PμPSC†C-PNëPSPëPj PiC-PrPIPëC%PμPSPSCΠPj CḡPëP·PëPeCr C,CḡPsPjP±PsP·Cr CΓP»C-Pr PsC†C-PSPëC,Pë PIBḡ™ CΠP·PeC-CΓC,CH PeCḡPsPIC- Cr PiP°C†C-C”PSC,C-PI P· CḡPëP·PëPePsPj PiC-PrPIPëC%PμPSPsC— PIBḡ™ CΠP·PePsCΓC,C-, PIPeP»CḡC†P°CḡC†Pë PeCḡC-PsPiP»PsP±CrP»C-PSPë, C...C-P»PsPjC-PeCḡPsPSPμPjC-Cḡ PiPsP»PsPrCrPIP°PSPSCΠ/ PiPsPjC-C,PSPs PIPëCΓPsPePëPNë CḡC-PIPμPSCḡ C,CḡPëPiP»C-C†PμCḡPsP»C-PI (C,CḡPëPiP»C-C†PμCḡPëPrC-PI) P°P±Ps PjPsPSPsPeP»PsPSP°P»CHPSCr PiP°PjPsPiP°C,C-Cḡ.



PiPsPeP°P·P°P»Ps, C%Ps PIC-PS PiCḡPsPSPëPeP°C” PeCḡC-P·CH PiP»P°C†PμPSC,Cf,  
PsCfPsP±P»PëPIPs PI P†P†† C,CḡPëPjPμCfC,CḡC-. PḡP»C-PSC-C†PSPëPḡ PrPsCfPIC-Pr  
PIPëPePsCḡPëCfC,P°PSPSCf C-PjCfPSPsPiP»PsP±CfP»C-PSC-PI CfPIC-PrC†PëC,CH PiCḡPs  
C,Pμ, C%Ps PSPμ CfP»C-Pr PsC†C-PeCfPIP°C,Pë C€PeC-PrP»PëPIPsPiPs PIPiP»PëPICf PSP°  
PiPμCḡPμP±C-Pi PIP°PiC-C,PSPsCfC,C-, PSP° PiP»C-Pr P°P±Ps PSPμPjPsPIP»Cf.

P†PjCfPSPsPiP»PsP±CfP»C-PSPë PiCḡPsPSPëPeP°CḡC,CH Cf PiCḡCfPrPSPμ PjPsP»PsPePs C-  
PjPsP¶CfC,CH CfPiCḡPëCfC,Pë PiPμCḡPμPSPμCfPμPSPSCḡ P·P°C...PëCfPSPëC...  
P°PSC,PëC,C-P» PrPs PSPsPIPsPSP°CḡPsPrP¶PμPSPsPiPs.

PḡP»C-PSC-C†PSPëPḡ PrPsCfPIC-Pr P·P°CfC,PsCfCfPIP°PSPSCf  
C-PjCfPSPsPiP»PsP±CfP»C-PSC-PI PiPsPeP°P·P°PI, C%Ps PSPμPjP°C” PIPiP»PëPICf PSP°  
C,,PμCḡC,PëP»CHPSC-CfC,CH.

P—PrP°C,PSC-CfC,CH PIPiP»PëPIP°C,Pë PSP° C€PIPëPrPeC-CfC,CH CḡPμP°PeC†C-C— PiCḡPë  
PePμCḡCáPIP°PSPSC- P°PIC,PsC,CḡP°PSCfPiPsCḡC,PsPj P°P±Ps C-PSC€PëPjPë  
PjPμC...P°PSC-P·PjP°PjPë.

PkPμ CfPiPsCfC,PμCḡC-PiP°P»PsCfCf PIPiP»PëPICf PSP° P·PrP°C,PSC-CfC,CH  
PePμCḡCfPIP°C,Pë P°PIC,PsPjPsP±C-P»PμPj C,P° PiCḡP°C†CḡPIP°C,Pë P· C-PSC€PëPjPë  
PjPμC...P°PSC-P·PjP°PjPë.

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

P’C-PsPIPμPS CfP»C-Pr PIPsPrPëC,Pë PIPSCfC,CḡC-C€PSCḡPsPIPμPSPSPs  
PeCḡP°PiP»PëPSPSPs P· PiPsC†P°C,PePsPIPsCḡ C€PIPëPrPeC-CfC,Cḡ  
0,5Bḡ“1,0 PjP»/PePi PjP°CfPë C,C-P»P°/PiPsPr PiCḡPsC,CfPiPsPj 30 C...PI. P—P°  
CfPjPsPIPë PIC-PrCfCfC,PSPsCfC,C- P±CfPrCḡ-CfPePëC... PSPμP±P°P¶P°PSPëC...  
PiPsP±C-C†PSPëC... CḡPμP°PeC†C-Pḡ C€PIPëPrPeC-CfC,CH PIPiPμPrPμPSPSCf  
PjPsP¶PSP° PiPsCfC,CfPiPsPIPs P·P±C-P»CHC€CfPIP°C,Pë  
(CḡPμPePsPjPμPSPPrPsPIP°PSPμ P·P±C-P»CHC€PμPSPSCf PSP°  
0,5Bḡ“1,5 PjP»/PePi PjP°CfPë C,C-P»P°/PiPsPr PePsP¶PSC- 10 C...PI). P—P° PrP°PSPëPjPë  
PeP»C-PSC-C†PSPëC... PrPsCfP»C-PrP¶PμPSCḡ, PjP°PeCfPëPjP°P»CHPSP°  
C€PIPëPrPeC-CfC,CH PIPiPμPrPμPSPSCf CfC,P°PSPsPIPëC,CH  
8,5 PjP»/PePi PjP°CfPë C,C-P»P°/PiPsPr.

PμCḡPë PICḡPsPrP¶PμPSC-Pḡ P°PiP°PjPjP°PiP»PsP±CfP»C-PSPμPjC-C— P°P±Ps  
PiC-PiPsPiP°PjPjP°PiP»PsP±CfP»C-PSPμPjC-C—, C,CfP¶PePsPjCf PePsPjP±C-PSPsPIP°PSPsPjCf  
C-PjCfPSPsPrPμC,,C-C†PëC,C-, CfPëPSPrCḡPsPjC- P’C-CfPePsC,C,P° Bḡ“ PḡP»PrCḡPëC†P°,  
PSPμPeP»P°CfPëC,,C-PePsPIP°PSPsPjCf PIP°CḡC-P°P±PμP»CHPSPsPjCf  
C-PjCfPSPsPrPμC,,C-C†PëC,C- Bḡ“ PiPs 4Bḡ“5 PjP» (0,4Bḡ“0,5 Pi)/PePi (PjC-PSC-PjP°P»CHPSP°  
PrPsP·P° Bḡ“ 2 PjP» (0,2 Pi)/PePi, PjP°PeCfPëPjP°P»CHPSP° Bḡ“ 8 PjP» (0,8 Pi)/PePi) PePsP¶PSC-  
3Bḡ“4 C,PëP¶PSC-, PiC-PrP±C-Cḡ PrPsP·Pë P·PrC-PḡCfPSCḡC”C,CHCfCf  
C-PSPrPëPIC-PrCfP°P»CHPSPs, P·P°P»PμP¶PSPs PIC-Pr PIPëCḡP°P¶PμPSPsCfC,C-  
C-PSC,,PμPeC†C-PḡPSPsPiPs CfPëPSPrCḡPsPjCf (PsPiC,PëPjP°P»CHPSPëPj  
PIPiP°P¶P°C”C,CHCfCf PrPsCfCfPiPSPμPSPSCf CḡC-PIPSCf CfPëCḡPsPIP°C,PePsPIPsPiPs  
IgG 5 Pi/P», P°P»Pμ PSPμ PjPμPSC€Pμ

3вґ“4 Pi/P»).

Рґґґґґ P·P°PjC-Сґґґґґ-Р№ C,Рґґґґґ°PіC-C— PіCґґґґґ PIC,PsCґґґґґPSPSPsPjCf  
C-PjCfPSPsPrPґґґґґ,,C-C†PёC,C-, Cґґґґґ PіCґґґґґ°PIPёP»Ps, вґґ“ PіPs 2вґґ“4 PjP» (0,2вґґ“0,4 Pi)/PePi  
PePsPґґґґґPёC... 3вґґ“4 C,PёPґґґґґPSC-.

Рґґґґґ C†PёC,PsPiPґґґґґPSC-Cґґґґґ... Cґґґґґ-P·PSPsPjP°PSC-C,PSPsPiPs T’PґґґґґPґґґґґ·Cf  
(PiPsCґґґґґ,CґґґґґPё№ C,P° C...CґґґґґPsPSC-C†PSPёP№ P»Pґґґґґ№PePsP., P°PіP»P°Cґґґґґ,PёC†PSP°  
P°PSPґґґґґC-Cґґґґґ, Cґґґґґ,P°PS PіC-Сґґґґґ»Cґґґґґ C,Рґґґґґ°PіC-C— C†PёC,PsCґґґґґ,P°C,PёPeP°PjPё) вґґ“ PіPs  
2вґґ“4 PjP» (0,2вґґ“0,4 Pi)/PePi/PrPsP±Cf PіCґґґґґPsC,CґґґґґPiPsPj 4вґґ“5 PrC-P± P°P±Ps 10 PjP» (1  
Pi)/PePi/PrPsP±Cf PіCґґґґґPsC,CґґґґґPiPsPj 2-C... PrC-P±.

Рґґґґґ C,CґґґґґPePёC... C,,PsCґґґґґPjP°C... P±P°PeC,РґґґґґC-P°P»CґґґґґPSPs-C,PsPeCґґґґґPёC†PSPёC...  
C,P° PIC-CґґґґґCfCґґґґґPSPёC... C-PSC,,PґґґґґC†C-P№ (PIPeP»CґґґґґP°CґґґґґPё C...C-CґґґґґCfCґґґґґPiC-C†PSC-  
CfCґґґґґPeP»P°PrPSPґґґґґPSPSCґґґґґ, C%Ps CґґґґґCfPіCґґґґґPsPIPсPrPґґґґґCfCґґґґґ,CґґґґґCґґґґґ  
P±P°PeC,РґґґґґC-C”PjC-C”Cґґґґґ C- CґґґґґPіC,PёPePs-PіC-C”PjC-C†PSPёPjPё Cґґґґґ,P°PSP°PjPё C,P°  
PіCґґґґґ PіC-PrPiPsC,PsPIC†C- C...C-CґґґґґCfCґґґґґPiC-C†PSPёC... C...PIPсCґґґґґPёC... PrPs  
PsPіPґґґґґCґґґґґC†C-C—) вґґ“ PіPs 4 PjP» (0,4 Pi)/PePi/PrPsP±Cf 1вґґ“4 PrPsP±Pё.

Рґґґґґ C-PrC-PsPіP°C,PёC†PSC-P№ C,CґґґґґPjP±PsC†PёC,PsPiPґґґґґPSC-C†PSC-P№  
PіCfCґґґґґPіCfCґґґґґ- вґґ“ PіPs 2вґґ“4 PjP» (0,2вґґ“0,4 Pi)/PePi/PrPsP±Cf PіCґґґґґPsC,CґґґґґPiPsPj  
2вґґ“5 PrC-P± P°P±Ps 8вґґ“10 PjP» (0,8вґґ“1 Pi)/PePi/PrPsP±Cf Cf PіPґґґґґCёCf PrPsP±Cf C,P° Cf  
CґґґґґP°C- PSPґґґґґPsP±C...C-PrPSPсCґґґґґ,C- вґґ“ PSP° C,CґґґґґPґґґґґ,Cґґґґґ PrPsP±Cf.

Рґґґґґ CґґґґґPSPPrCґґґґґPsPjC- P”C-C”PSP° вґґ“ P’P°CґґґґґPґґґґґ, C...CґґґґґPSC-C†PSC-P№  
P·P°PіP°P»CґґґґґPSC-P№ PSPґґґґґ№CґґґґґPsPіP°C,C-C— (C%Ps PrPґґґґґC-C”P»C-P·CfC”),  
P·P°PіP°P»CґґґґґPSC-P№ PjC-PsPіP°C,C-C—, PіCґґґґґ°PSCfP»PґґґґґP°C,PsP·C- P’PґґґґґPґґґґґCґґґґґP° вґґ“  
PіPs 2вґґ“4 PjP» (0,2вґґ“0,4 Pi)/PePi/PrPsP±Cf PіCґґґґґPsC,CґґґґґPiPsPj 3вґґ“7 PrC-P±, Cf CґґґґґP°C-  
PSPґґґґґPsP±C...C-PrPSPсCґґґґґ,C- вґґ“  
5-PrPґґґґґPSPSC- PeCfCґґґґґPё P»C-PeCfPIP°PSPSCґґґґґ PіPsPIC,PsCґґґґґPіP°C,Pё P·  
C-PSC,РґґґґґPіP°P»P°PjPё Cf 4 C,PёPґґґґґPSC-.

Рґґґґґ PrPґґґґґPjP°C,PsPjC-PsP·PёC,C- вґґ“ PіPs 10 PjP» (1 Pi) PePi/PrPsP±Cf PіCґґґґґPsC,CґґґґґPiPsPj  
3вґґ“5 PrC-P±.

Рґґґґґ CґґґґґPёCґґґґґ,РґґґґґPSPёC... P·P°C...PIPсCґґґґґPіP°PSPSCґґґґґ... CґґґґґPіPsP»CfC†PSPсC—  
C,PeP°PSPёPSPё (CґґґґґPіPjP°C,PsC—PrPSPёP№ P°Cґґґґґ,CґґґґґPёC, C,P° C-PS.) вґґ“ PіPs 2вґґ“5 PjP»  
(0,2вґґ“0,5 Pi)/PePi/PrPsP±Cf PіCґґґґґPsC,CґґґґґPiPsPj 5 PrC-P±.

Рґґґґґ CґґґґґPSPPrCґґґґґPsPjC- PґґґґґPIP°CґґґґґPeC- вґґ“ PіPs 10вґґ“20 PjP» (1вґґ“2 Pi)/PePi Cf  
Cґґґґґ-PIPSPёC... PrPsP·P°C... P·P° 2вґґ“5 PrC-P± P°P±Ps 20 PjP» (2 Pi)/PePi PsPrPSPсCґґґґґP°P·PsPIPс  
(PrPsPіPsPIPSPґґґґґPSPSCґґґґґ PrPs C,Рґґґґґ°PіC-C— P°C†Pґґґґґ,PёP»CґґґґґP»C-C†PёP»PsPIPсCґґґґґ  
PePёCґґґґґ»PsC,PsCґґґґґ).

Рґґґґґ C,CґґґґґPSCґґґґґPіP»P°PSC,P°C†C-C— PeC-Cґґґґґ,PePsPIPсPiPs PjPsP·PeCf вґґ“ 5 PjP» (0,5  
Pi)/PePi PsPrPSPсCґґґґґP°P·PsPIPс P·P° 7 PrC-P± PrPs C,CґґґґґP°PSCґґґґґPіP»P°PSC,P°C†C-C—, PіPsC,C-Pj  
вґґ“ 1 CґґґґґP· PSP° C,PёPґґґґґPrPґґґґґPSCґґґґґ PіCґґґґґPsC,CґґґґґPiPsPj 3 PjC-CґґґґґCґґґґґC†C-PI PіC-Cґґґґґ»Cґґґґґ  
C,CґґґґґP°PSCґґґґґPіP»P°PSC,P°C†C-C—.

P”P»Cґґґґґ P·P°Cґґґґґ,PsCґґґґґPіP°PSPSCґґґґґ Cf CґґґґґPeP»P°PrC- PePsPjPіP»PґґґґґCґґґґґPSPсC—  
C,Рґґґґґ°PіC-C— PrPsCґґґґґPsCґґґґґ»PёC... PіP°C†C-C”PSC,C-PI P· C,CґґґґґPePsCґґґґґ  
PіPSPґґґґґPіPjPsPSC-C”Cґґґґґ, CґґґґґPіCґґґґґC†PёPSPґґґґґPSPсCґґґґґ PePsCґґґґґPsPSP°PIC-CґґґґґCfCґґґґґPSPсCґґґґґ  
C-PSC,,PґґґґґC†C-C”Cґґґґґ COVID-19 / SARS-CoV-2 (PrPёPI. CґґґґґP·PrC-P»

В«PμPsPeP°P·P°PSPSCIB»), CḡPμPePsPjPμPSPPrPsPIP°PSP° PrPsP·P° 0,8вḡ“1,0 Pi/PePi PjP°CÍPë C,C-P»P° PSP° PrPsP±CÍ PiCḡPsC,CÍPiPsPj 2 PrC-P± (PeCÍCḡCÍPsPIP° PrPsP·P° 1,6вḡ“2,0 Pi/PePi PjP°CÍPë C,C-P»P°).

PḡCḡP°C,PSC-CÍC,CH C-PSC,,CÍP·C-PNḡ C,P° C€PIPëPrPeC-CÍC,CH PIPμPrPμPSPSCÍ PIPëP·PSP°C±P°CḡC,CHCÍCÍ P»C-PeP°CḡPμPj P·P°P»PμP¶PSPs PIC-Pr CÍC,P°PSCÍ PïP°C†C-C”PSC,P°. P”PsP±PsPIP° PrPsP·P° PjPsP¶Pμ P±CÍC,Pë CÍPePsCḡPëPiPsPIP°PSP° P·PjC-CḡPeCÍPIP°PSCḡ PSPμPïPμCḡPμPIPëC%PμPSPSCÍ PjP°PeCÍPëPjP°P»CHPSPsPiPs PrPsPïCÍCÍC,PëPjPsPiPs PrPsP±PsPIPsPiPs PsP±вḡ™ C”PjCÍ C-PSC,,CÍP·C-PNḡPSPsC— C,PμCḡP°PiC-C—. PhP±PsPIвḡ™ CÍP·PePsPIPëPj C” PePsPSC,CḡPsP»CH CÍC,P°PSCÍ CÍPëCÍC,PμPjPë P·PiPsCḡC,P°PSPSCÍ PeCḡPsPIC- C,P° PrC-CÍCḡPμP·CÍ, PsCÍPsP±P»PëPIPs PI PïP°C†C-C”PSC,C-PI P·PSP°PrP»PëC€PePsPIPsCḡ PjP°CÍPsCḡ C,C-P»P°.

PμP°C†C-C”PSC,Pë PrPëC,CÍC±PsPiPs PIC-PeCá. P”PsP·Pë PrP»CÍ PrC-C,PμPNḡ (PIC-PePsPj PIC-Pr 0 PrPs 18 CḡPsPeC-PI) PSPμ PIC-PrCḡC-P·PSCÍCḡC,CHCÍCÍ PIC-Pr PrPsP· PrP»CÍ PrPsCḡPsCÍP»PëC..., PsCÍPeC-P»CHPePë PrPsP·P° PrP»CÍ PePsP¶PSPsPiPs PïPsPeP°P·P°PSPSCÍ PIPëP·PSP°C±P°C”C,CHCÍCÍ PIC-PrPïPsPIC-PrPSPs PrPs PjP°CÍPë C,C-P»P° C,P° PePsCḡPëPiCÍC”C,CHCÍCÍ P·P°P»PμP¶PSPs PIC-Pr PeP»C-PSC-C±PSPsPiPs CḡPμP·CÍP»CHC,P°C,CÍ.

P”C-C,Pë. P»C-PeP°CḡCÍCHPePëPNḡ P·P°CÍC-P± PjPsP¶PSP° P·P°CÍC,PsCÍPsPICÍPIP°C,Pë CÍ PïPμPrC-P°C,CḡPëC±PSC-PNḡ PiCḡP°PeC,PëC†C- (PrPëPI. CḡPsP·PrC-P» В«PμPsPeP°P·P°PSPSCIB»).

### **PμPμCḡPμPrPsP·CáPIP°PSPSCÍ.**

PμPμCḡPμPrPsP·CÍPIP°PSPSCÍ PjPsP¶Pμ PïCḡPëP·PIPμCÍC,Pë PrPs PiC-PïPμCḡPIP»PμPjC-C— C,P° PiC-PrPIPëC%PμPSPSCÍ PïCÍP·PePsCÍC,C- PeCḡPsPIC-, PsCÍPsP±P»PëPIPs CÍ PïP°C†C-C”PSC,C-PI P·CḡPëP·PëPePsPj, PIPeP»CḡC±P°CḡC±Pë PïP°C†C-C”PSC,C-PI P»C-C,PSCḡPsPiPs PIC-PeCÍ P°P±Ps PïP°C†C-C”PSC,C-PI P·PïPsCḡCÍC€PμPSPSCÍPj C,,CÍPSPeC†C-C— PSPëCḡPsPe.

### **PμPsP±C-C±PSC- CḡPμP°PeC†C-C—.**

P— P±PsPeCá CÍPëCÍC,PμPjPë PeCḡPsPIC- C,P° P»C-PjC,,P°C,PëC±PSPsC— CÍPëCÍC,PμPjPë: P°PSPμPjC-CÍ, P»C-PjC,,P°PrPμPSPsPïP°C,C-CÍ, PiPμPjPsP»C-P·, P»PμPNḡPePsPïPμPSC-CÍ, PiPμPjPsP»C-C,PëC±PSP° P°PSPμPjC-CÍ.

P— P±PsPeCá C-PjCáPSPSPsC— CÍPëCÍC,PμPjPë: PiC-PïPμCḡC±CÍC,P»PëPIC-CÍC,CH, P°PSP°C,,C-P»P°PeC,PëC±PSPëPNḡ C€PsPe, P°PSP°C,,C-P»P°PeC,PëC±PSP° CḡPμP°PeC†C-CÍ, P°PSP°C,,C-P»P°PeC,PsC—PrPSP° CḡPμP°PeC†C-CÍ, P°PSPiC-PsPSPμPICḡPsC,PëC±PSPëPNḡ PSP°P±CḡCÍPe, PSP°P±CḡCÍPe PsP±P»PëC±C±CÍ.

P— P±PsPeCá PμPSPPrPsPeCḡPëPSPSPsC— CÍPëCÍC,PμPjPë: CḡPsP·P»P°PrPë C,,CÍPSPeC†C-C— C%PëC,PsPIPëPrPSPsC— P·P°P»PsP·Pë.

P— P±PsPeCá PSPμCḡPIP»PIPsC— CÍPëCÍC,PμPjPë: PiPsP»PsPIPSPëPNḡ P±C-P»CH,

PiPsC7CfC€PµPSPSCl PjPsP·PePsPIPsPiPs PeC7PsPIPsPsP±C-PiCf, P°CfPµPīC,PëC±PSPëPNë  
PjPµPSC-PSPiC-C,, PjC-PiC7PµPSC7, P·P°PīP°PjPsC7PsC±PµPSPSCl, PīP°C7PµCfC,PµP·C-Cl,  
PiC-PiPsCfC,PµP·C-Cl, P°PjPSPµP·C-Cl, PIC-PrC±CfC,C,Cll PīPµC±C-PSPSCl,  
PrPëP·P°C7C,C7C-Cl, PrPëCfPīPµPIP·C-Cl, PiPsC7CfC€PµPSPSCl C7C-PIPsPPIP°PīPë,  
C,C7P°PSP·PëC,PsC7PSP° C-C€PµPjC-C±PSP° P°C,P°PeP°, C,C7PµPjPsC7.

*PµCfPëC...C-C±PSC- PiPsC7CáC€PµPSPSCl:* P·P±CfPrP¶PµPSPSCl, C,C7PëPIP¶PSC-CfC,CH,  
P±PµP·CfPsPSPSCl.

*P— P±PsPeCá CfPµC7CfCl:* C-PSC,,P°C7PeC, PjC-PsPeP°C7PrP°, C,P°C...C-PeP°C7PrC-Cl,  
CfPµC7CfPµP±PëC,C,Cll, C±C-P°PSPsP·.

*P— P±PsPeCá CfCáPrPëPS:* PSPµPrPsCfC,P°C,PSC-CfC,CH PīPµC7PëC,,PµC7PëC±PSPëC...  
CfCfPrPëPS, P°C7C,PµC7C-P°P»CHPSP° PiC-PiPsC,PµPSP·C-Cl, P°C7C,PµC7C-P°P»CHPSP°  
PiC-PiPµC7C,PµPSP·C-Cl, PīPµC7PëC,,PµC7PëC±PSP° C...PsP»PsPrPSC-CfC,CH, C,,P»PµP±C-C,,  
C,C7PsPjP±PsP· PiP»PëP±PsPePëC... PIPµPS.

*P— P±PsPeCá CfPëCfC,PµPjPë PrPëC...P°PSPSCl, C,PsC7P°PeP°P»CHPSC- C,P°  
PjPµPrC-P°CfC,PëPSP°P»CHPSC- PiPsC7CáC€PµPSPSCl:* PrPëC...P°P»CHPSP°  
PSPµPrPsCfC,P°C,PSC-CfC,CH, P»PµPiPµPSPµPIP° PµPjP±PsP»C-Cl, P»PµPiPµPSPµPIPëPNë  
PSP°P±C7CllPe, P±C7PsPSC...PsCfPīP°P·Pj, P·P°PrPëC€PeP°, PeP°C€PµP»CH,  
P·P±C-P»CHC€PµPSP° C±P°CfC,PsC,P° PrPëC...P°PSPSCl, C7PëPSPsC7PµCll, P°CfC,PjP°,  
P·P°PeP°P»PrPµPSC-CfC,CH PSPsCfP°, PsC7PsC,,P°C7PëPSPiPµP°P»CHPSPëPNë  
PSP°P±C7CllPe, C,,P°C7PëPSPiPsP»P°C7PëPSPiPµP°P»CHPSPëPNë P±C-P»CH.

*P— P±PsPeCá PePëC€PePsPIPs-C€P»CáPSPePsPIPsPiPs C,C7P°PeC,Cá:* PSCfPrPsC,P°,  
P±P»C7HIP°PSPSCl, PrC-P°C7PµCll, P±C-P»CH Cí P¶PëPIPSC,C-.

*P— P±PsPeCá C€PeC-C7Pë C,P° PiC-PrC€PeC-C7PSPsC— PeP»C-C,PePsPIPëPSPë:* PµPeP·PµPjP°,  
PeC7PsPīPëPīPë™ CllPSPeP°, PIPëCfPëPī, PµC7PëC,PµPjP°C,PsP·PSPëPNë PIPëCfPëPī,  
PrPµC7PjP°C,PëC,, CfPIPµC7P±C-P¶, P°P»PsPīPµC±C-Cll, C...PsP»PsPrPSPëPNë PiC-C,,  
C7PµP°PeC±C-C— C,,PsC,PsC±CfC,P»PëPIPSCfC,C-, PSC-C±PSPµ PīPsC,C-PSPSCl.

*P— P±PsPeCá CfPePµP»PµC,PSPs-PjPë™ CllP·PsPIPsC— CfPëCfC,PµPjPë C,P°  
CfPīPsP»CáC±PSPsC— C,PeP°PSPëPSPë:* P±C-P»CH Cí CfPīPëPSC-, P±C-P»CH Cí  
PeC-PSC±C-PIPeP°C..., P°C7C,C7P°P»PiC-Cll, CfPīP°P·PjPë PjPë™ CllP·C-PI,  
PīPsCfPjPëPeCfPIP°PSPSCl PjPë™ CllP·C-PI, PjC-P°P»PiC-Cll.

*P— P±PsPeCá PSPëC7PsPe C,P° CfPµC±PsPIPëPrC-P»CHPSPsC—  
CfPëCfC,PµPjPë:* PiPsCfC,C7P° PSPëC7PePsPIP° PSPµPrPsCfC,P°C,PSC-CfC,CH,  
PīC7PsC,PµC—PSCfC7C-Cll.

*P— P±PsPeCá PsC7PiP°PSC-PI P·PsC7Cá:* PePsPSB7™ C7PSPeC,PëPIC-C,, P±C-P»CH PI  
PsC±P°C..., PSP°P±C7CllPeP°PSPSCl PsC±PµPNë.

*P— P±PsPeCá PsC7PiP°PSC-PI CfP»CáC...Cá:* PIPµC7C,PëPīPs, C7C-PrPëPSP° Cí  
PIPSCfC,C7C-C€PSC7PsPjCf PICfCfC-.

*P— P°PīP°P»CHPSC- PiPsC7CáC€PµPSPSCl C,P° C7PsP·P»P°PrPë Cá PjC-CfC±C-  
PIPIPµPrPµPSPSCl:* PīP°C7CllC±PeP°, PiC7PëPīPsPīPsPrC-P±PSC- CfPëPjPīC,PsPjPë,  
CfP»P°P±PeC-CfC,CH, PrPëCfPePsPjC,,PsC7C, Cí PiC7CfPrCllC..., P±C-P»CH,  
PIC-PrC±CfC,C,Cll CfC,PëCfPSPµPSPSCl Cí PiC7CfPrCllC..., P°CfC,PµPSC-Cll,  
PSPµP·PrCfP¶P°PSPSCl, PīPµC7PëC,,PµC7PëC±PSC- PSP°P±C7CllPePë, PIC-PrC±CfC,C,Cll

Р¶P°CТҫCр, PиC-PrPIPёC%oPµPSP° PIC,PsPjP»CТҫPIP°PSC-CГC,CH, PsP·PSPsP±,  
PиCТҫPёPиP»PёPIPё, PiC-PиPµCТҫPµPjC-CЦ, PiC-PиPµCТҫPiC-PrCТҫPsP·; CТҫPµP°PeC†C-C— Cр  
PjC-CГC†C- PИPИPµPrPµPSPSCЦ, PИPeP»CТҫC†P°CТҫC†Pё P±C-P»CH, PиC-PrPIPёC%oPµPSPSCЦ  
C†CрC,P»PёPIPсГC,C-, PiC-PиPµCТҫPµPjC-CТ, PSP°P±CТҫЦPе, C„P»PµP±C-C,,  
CГPIPµCТҫP±C-P¶.

P»P°P±PsCТҫP°C,PsCТҫPSC- PrPsCГP»C-PrP¶PµPSPSCЦ: PиC-PrPIPёC%oPµPSPSCЦ  
PиPµC†C-PSPePsPIPёC... C„PµCТҫPjPµPSC,C-PI, PiPsPjPёP»PePsPIPёP№ PиPsP·PёC,PёPIPSPёP№  
CТҫC-PIPµPSCТҫ PиP»CТҫPePsP·Pё PИ PeCТҫPsPIC-, PиC-PrPIPёC%oPµPSPSCЦ  
PeCТҫPµP°C,PёPSC-PSCр PeCТҫPsPIC-, PиC-PrPIPёC%oPµPSPёP№ CТҫC-PIPµPSCТҫ  
C...PsP»PµCГC,PµCТҫPёPSCр PИ PeCТҫPsPIC-, PиC-PrPIPёC%oPµPSPёP№ CТҫC-PIPµPSCТҫ  
CГPµC†PsPIPёPSPё, P·PSPёP¶PµPSPёP№ CТҫC-PIPµPSCТҫ PиPµPjP°C,PsPeCТҫPёC,Cр,  
P·PSPёP¶PµPSPёP№ CТҫC-PIPµPSCТҫ PµCТҫPёC,CТҫPsC†PёC,C-PI, PiPsP·PёC,PёPIPSP° PиCТҫЦPjP°  
PиCТҫPsP±P° PҫCрPjP±CГP°, P·PjPµPSCёPµPSPµ PSP°CГPёC†PµPSPSCЦ PePёCГPSPµPj.

P†PSC„PµPeC†C-C— C,P° C-PSPIP°P·C-C—: P±CТҫPsPSC...C-C,, PSP°P·PsC„P°CТҫPёPSPиC-C,,  
C...CТҫPsPSC-C†PSPёP№ CГPёPSCрCГPёC,, PjC-PePsP·, C-PSC„PµPeC†C-CЦ,  
C-PSC„C-PeCрPIP°PSPSCЦ PSPёCТҫPsPe, CГPёPSCрCГPёC,, C-PSC„C-PeCрPIP°PSPSCЦ  
PIPµCТҫC...PSC-C... PrPёC...P°P»CHPSPёC... CёP»CЦC...C-PI, C-PSC„C-PeCрPIP°PSPSCЦ  
CГPµC†PsPIPёC... CёP»CЦC...C-PI, P±P°PeC,PµCТҫC-P°P»CHPSPµ  
C-PSC„C-PeCрPIP°PSPSCЦ CГPµC†PsPIPёC... CёP»CЦC...C-PI.

PҫCТҫP°PIPjPё, PsC,CТҫCзC”PSPSCЦ C,P° P·P°PiP°P»CHPSC- PиCТҫPsC†PµPrCзCТҫPSC-  
CзCГPeP»P°PrPSPµPSPSCЦ: P·P°P±C-P№, PiPsCГC,CТҫPµ CрCТҫP°P¶PµPSPSCЦ P»PµPiPµPSC-PI,  
PиPsPiBҫ™ CЦP·P°PSPµ P· PиPµCТҫPµP»PёPIP°PSPSCЦPj PeCТҫPsPIC-.

P”C-C,Pё. P’ PeP»C-PSC-C†PSPёC... PrPsCГP»C-PrP¶PµPSPSCЦC... PиCТҫPµPиP°CТҫP°C,Cр  
P’C-PsPIPµP P±C-P»CHCёC-CГC,CH PиPsP±C-C†PSPёC... CТҫPµP°PeC†C-P№ Cр PrC-C,PµP№  
P±CрP»Pё PsC†C-PSPµPSC- CЦPe P»PµPiPeC-, C%oPs CёPIPёPrPePs CрCГCрPIP°P»PёCГCЦ  
CГP°PjPsCГC,C-P№PSPs P°P±Ps Cр PIC-PrPиPsPIC-PrCH PSP° PиCТҫPsCГC,C- P·P°C...PsPrPё  
(P·PSPёP¶PµPSPSCЦ CёPIPёPrPePsCГC,C- PИPSCрC,CТҫC-CёPSCТҫPsPIPµPSPSPsPiPs  
PИPИPµPrPµPSPSCЦ C†Pё P№PsPiPs C,PёPjC†P°CГPsPIPµ PиCТҫPёPиPёPSPµPSPSCЦ).

PµPsPIC-PrPsPjP»PµPSPSCЦ PиCТҫPs PиPsP±C-C†PSC- CТҫPµP°PeC†C-C— PиC-CГP»CЦ  
CТҫPµC”CГC,CТҫP°C†C-C— P»C-PeP°CТҫCГCHPePsPiPs P·P°CГPsP±Cр PjP°C”  
PIP°P¶P»PёPIPµ P·PSP°C†PµPSPSCЦ. PиPµ PrP°C” P·PjPsPiCр PиCТҫPsPiPsPrPёC,Pё  
PjPsPSC-C,PsCТҫPёPSPи CГPиC-PIPIC-PrPSPsCёPµPSPSCЦ PePsCТҫPёCГC,CH/CТҫPёP·PёPe  
PиCТҫPё P·P°CГC,PsCГCрPIP°PSPSC- C†CHPsPiPs P»C-PeP°CТҫCГCHPePsPiPs  
P·P°CГPsP±Cр. PҫPµPrPёC†PSPёPj C,P° C„P°CТҫPjP°C†PµPIC,PёC†PSPёPj  
PиCТҫP°C†C-PIPSPёPeP°Pj, P° C,P°PePsP¶ PиP°C†C-C”PSC,P°Pj P°P±Ps C—C...  
P·P°PePsPSPSPёPj PиCТҫPµPrCГC,P°PIPSPёPeP°Pj CГP»C-Pr PиPsPIC-PrPsPjP»CЦC,Pё  
PиCТҫPs CрCГC- PИPёPиP°PrPePё PиC-PrPsP·CТҫCТҫPIP°PSPёC... PиPsP±C-C†PSPёC...  
CТҫPµP°PeC†C-P№ C,P° PIC-PrCГCрC,PSPsCГC,C- PµC„PµPeC,PёPIPSPсГC,C-  
P»C-PeP°CТҫCГCHPePsPiPs P·P°CГPsP±Cр C†PµCТҫPµP· PҫPIC,PsPjP°C,PёP·PsPIP°PSCр  
C-PSC„PsCТҫPjP°C†C-P№PSCр CГPёCГC,PµPjCр P· C„P°CТҫPjP°PePsPSP°PiP»CЦPrCр P·P°  
PиPsCГPёP»P°PSPSCЦPj: <https://aisf.dec.gov.ua>.

**PҫPµCТҫPjC-PS PиCТҫPёPrP°C,PSPсГC,C-. 3 CТҫPsPePё.**

