

Р†РќРŸРŸР РЈРЉРјРјРјРј

**РrР»CП РjРµРrРёC‡PSPsPiPs Р·Р°CГC,PsCГCрPIР°PSPSCП Р»C-РeР°CГCГЧРePsPiPs
Р·Р°CГPsP±CГ**

Р†РЉРŸР”Р-Р·Р’Рђ^{В®}

(XGEVA^{В®})

РŸРeР»Р°Рr:

РrC-ЧC‡Р° ЧГРµC‡PsPIPёPSP°: РrРµPSPsCГCрPjР°Р±;

1 РjР» ЧГPsР·C‡РёPSCГ РjC-ГГC,РёC,ЧР 70 РjPi РrРµPSPsCГCрPjР°Р±CГ; 1 C„Р»Р°РePsPS
(1,7 РjР») РjC-ГГC,РёC,ЧР 120 РjPi РrРµPSPsCГCрPjР°Р±CГ;

*РrPsPiPsPjC-РПPSC- ЧГРµC‡PsPIPёPSPё: CГPsЧГР±C-C, (E 420), РeРёCГР»PsC,Р° PsCГC,PsPIP°
Р»ЧРPsPrCПPSP°, PSP°C,ЧГC-ЧР PiC-РrЧГPsPeCГРёРr, PiPsР»C-ГГPsЧГР±Р°C, 20, PIPsPrР°
РrР»CП C-PSБГ™ C”РeCГC-Р№.*

Р»C-РeР°CГCГЧРeР° C„PsЧГРjР°. Р PsР·C‡РёPS РrР»CП C-PSБГ™ C”РeCГC-Р№.

*РђCГPSPsPIPS- C„C-Р·РёРePs-C...C-РjC-C‡PSC- PIP»Р°CГC,РёPIPsCГC,C-: PiЧГPsР·PsЧГРёР№,
Р±РµР·Р±Р·Р±Р°CГPIPSРёР№ Р°Р±Ps РПPsPIC,CГPIР°C,РёР№ ЧГPsР·C‡РёPS, C%oPs РjPsРПРµ
РjC-ГГC,РёC,Рё PSPµР·PSP°C‡PSCГ РeC-Р»ЧРPeC-ГГC,ЧР PIC-Рr
PSP°PiC-PIPiЧГPsР·PsЧГРёC... РrPs Р±C-Р»РёC... Р±C-Р»РePsPIPsPiPsPrC-Р±PSPёC...
C‡Р°CГC,PsPe.*

**Р»Р°CГРjР°РePsC,РµЧГР°РiРµPIC,РёC‡PSP° PiЧГCрPiР°. Р»C-РeР°CГCГЧРeC-
Р·Р°CГPsР±Рё РrР»CП Р»C-РeCГPIР°PSPSCП Р·Р°C...PIPsЧГЧРPIР°PSCЧ РeC-ГГC,PsPe.
Р†PSCёC- Р»C-РeР°CГCГЧРeC- Р·Р°CГPsР±Рё, C%oPs PIP»РёPIР°ЧC,ЧР PSP°
CГC,ЧГCрPeC,CГЧГCГ C,Р° РjC-PSPµЧГР°Р»C-Р·Р°CГC-ЧР РeC-ГГC,PsPe.**

РЉPsPr РђРŸРГ Рђ05Р’РГ04.

Р»Р°CГРjР°РePsР»PsPiC-C‡PSC- PIP»Р°CГC,РёPIPsCГC,C-.

Р»Р°CГРjР°РePsPrРёPSP°РjC-РeР°.

РђРµC...Р°PSC-Р·Рj РrC-C—

RANKL C-ГГPSCГC” CПPe C,ЧГР°PSCГРjРµРjР±ЧГР°PSPSPёР№ Р°Р±Ps ЧГPsР·C‡РёPSPSPёР№
Р±C-Р»PsPe. RANKL PSPµPsР±C...C-PrPSPёР№ РrР»CП CГC,PIPsЧГРµPSPSCП,
C„CрPSPeCГC-PsPSCГPIР°PSPSCП C,Р° PIPёРПРёPIР°PSPSCП PsCГC,РµPsPeР»Р°CГC,C-PI БГ”

C"PrPëPSPsPiPs C,PëPíCí PeP»C-C,PëPS, PIC-PrPíPsPIC-PrP°P»CHbPSPëC... P·P°
CḡPμP·PsCḡP±C†C-CH PeC-Cl̇C,PsPe. PμC-PrPIPëC%PμPSP° P°PeC,PëPIPSC-Cl̇C,CH
PsCl̇C,PμPsPeP»P°Cl̇C,C-PI, C%Ps Cl̇C,PëPjCíP»CHC"C,CHCl̇Cḡ RANKL, C" PiPsP»PsPIPSPëPj
PjPμPrC-P°C,PsCḡPsPj PrPμCl̇C,CḡCíPeC†C-C— PeC-Cl̇C,PsPe PíCḡPë C—C...
PjPμC,P°Cl̇C,P°C,PëC‡PSPsPjCí CíCḡP°P¶PμPSPSC- C,P° PjC-C"P»PsPjPSC-PNḡ
C...PIPsCḡPsP±C-. P"PμPSPsCl̇CíPjP°P± bḡ" C†Pμ PjPsPSPsPeP»PsPSP°P»CHbPSPμ
P°PSC,PëC,C-P»Ps P»CHPrPëPSPë (IgG2), Cl̇PePμ P· PIPëCl̇PsPePsCH P°C,,C-PSPSC-Cl̇C,CH
C,P° Cl̇PíPμC†PëC,,C-C‡PSC-Cl̇C,CH PSP°PíCḡP°PIP»CḡC"C,CHCl̇Cḡ C,P°
P·PIbḡ™ Cl̇P·CíC"C,CHCl̇Cḡ P· RANKL, PíPsPíPμCḡPμPrP¶P°CHC‡Pë PIPëPSPëPePSPμPSPSCḡ
PIP·P°C"PjPsPrC-C— RANKL/RANK C- PíCḡPëP·PIPsPrCl̇C‡Pë PrPs P·PSPëP¶PμPSPSCḡ
PeC-P»CHPePsCl̇C,C- C,P° PíPsCl̇P»P°P±P»PμPSPSCḡ C,,CíPSPeC†C-C—
PsCl̇C,PμPsPeP»P°Cl̇C,C-PI, C,P°PePëPj C‡PëPSPsPj P·PjPμPSC€CíCHC‡Pë
CḡPμP·PsCḡP±C†C-CH C,P° PrPμCl̇C,CḡCíPeC†C-CH PeC-Cl̇C,PsPe, C-PSPPrCíPePsPIP°PSCí
CḡP°PePsPj.

P"C-PiP°PSC,PsPeP»C-C,PëPSPSC- PíCíC...P»PëPSPë PeC-Cl̇C,PsPe
C...P°CḡP°PeC,PμCḡPëP·CíCHC,CHCl̇Cḡ PμPeCl̇PíCḡPμCl̇C-C"CH P»C-PiP°PSPPrCí RANK
PSPμPsPíP»P°Cl̇C,PëC‡PSPëPjPë Cl̇C,CḡPsPjP°P»CHbPSPëPjPë PeP»C-C,PëPSP°PjPë C,P° RANK
PsCl̇C,PμPsPeP»P°Cl̇C,PsPíPsPrC-P±PSPëPjPë PiC-PiP°PSC,Cl̇CHPePëPjPë PeP»C-C,PëPSP°PjPë.
Pj PíP°C†C-C"PSC,C-PI P· PiC-PiP°PSC,PsPeP»C-C,PëPSPSPsCH PíCíC...P»PëPSPsCH
PeC-Cl̇C,PsPe PrPμPSPsCl̇CíPjP°P± P·PIbḡ™ Cl̇P·CíC"C,CHCl̇Cḡ P· P»C-PiP°PSPPrPsPj RANK,
Cl̇CíC,C,C"PIPs P·PjPμPSC€CíCHC‡Pë PeC-P»CHPeC-Cl̇C,CH P°P±Ps PμP»C-PjC-PSCíCHC‡Pë
PsCl̇C,PμPsPeP»P°Cl̇C,PsPíPsPrC-P±PSC- PiC-PiP°PSC,Cl̇CHPeC- PeP»C-C,PëPSPë. PíPe
PSP°Cl̇P»C-PrPsPe, P·PjPμPSC€CíC"C,CHCl̇Cḡ PsCl̇C,PμPsP»C-P· C-
PíCḡPsP»C-C,,PμCḡP°C,PëPIPSP° PíCíC...P»PëPSPSP° Cl̇C,CḡPsPjP° P·P°PjC-C%Cl̇C"C,CHCl̇Cḡ
PSPμPíCḡPsP»C-C,,PμCḡP°C,PëPIPSPsCH PrPëC,,PμCḡPμPSC†C-PNḡPsPIP°PSPsCH
C%C-P»CHbPSPsC,PeP°PSPëPSPSPsCH PSPsPIPsCH PeC-Cl̇C,PePsCH.

PαP°CḡPjP°PePsPrPëPSP°PjC-C‡PSC- PμC,,PμPeC,Pë

P' PeP»C-PSC-C‡PSPëC... PrPsCl̇P»C-PrP¶PμPSPSCḡC... C,,P°P·Pë P†P† Cí PíP°C†C-C"PSC,C-PI
P· PíC-P·PSCḡPsCH Cl̇C,P°PrC-C"CH P·P»PsCl̇PeC-Cl̇PSPëC... PíCíC...P»PëPS, Cl̇PeC-
PICḡP°P¶P°CHC,CH PeC-Cl̇C,PePë, PíC-PrC€PeC-CḡPSPμ PIPiPμPrPμPSPSCḡ
PíCḡPμPíP°CḡP°C,Cí P†PeCl̇PrP¶PμPIP°^B PePsP¶PSC- 4 C,PëP¶PSC- (Q4W) P°P±Ps PePsP¶PSC-
12 C,PëP¶PSC-PI PíCḡPëP·PIPsPrPëP»Ps PrPs C€PIPëPrPePsPiPs P·PSPëP¶PμPSPSCḡ
PjP°CḡPePμCḡC-PI CḡPμP·PsCḡP±C†C-C— PeC-Cl̇C,PsPe (uNTx/Cr, Cl̇PëCḡPsPIP°C,PePsPIPëPNḡ
CTx) C-P· Cl̇PμCḡPμPrPSC-Pj P·PSPëP¶PμPSPSCḡPj PSP° CḡC-PIPSC- PíCḡPëP±P»PëP·PSPs
80 % PrP»Cḡ uNTx/Cr, Cl̇PePμ PIPëPSPëPeP°P»Ps PíCḡPsC,Cl̇PiPsPj 1 C,PëP¶PSCḡ
PSPμP·P°P»PμP¶PSPs PIC-Pr PíPsPíPμCḡPμPrPSCḡPsPiPs P»C-PeCíPIP°PSPSCḡ
P±C-C,,PsCl̇C,,PsPSP°C,PsPj P°P±Ps PIC-Pr PIPëC...C-PrPSPsPiPs CḡC-PIPSCḡ uNTx/Cr. P'
PeP»C-PSC-C‡PSPëC... PrPsCl̇P»C-PrP¶PμPSPSCḡC... C,,P°P·Pë P†P†P† Cí PíP°C†C-C"PSC,C-PI
C-P· PíC-P·PSCḡPsCH Cl̇C,P°PrC-C"CH P·P»PsCl̇PeC-Cl̇PSPëC... PíCíC...P»PëPS, Cl̇PeC-
PICḡP°P¶P°CHC,CH PeC-Cl̇C,PePë, Cl̇PμCḡPμPrPSC" P·PSPëP¶PμPSPSCḡ uNTx/Cr PSP°
CḡC-PIPSC- PíCḡPëP±P»PëP·PSPs 80 % PíC-PrC,CḡPëPjCíPIP°P»PsCl̇Cḡ PIPeP»CHC‡PSPs PrPs
49-PiPs C,PëP¶PSCḡ P»C-PeCíPIP°PSPSCḡ PíCḡPμPíP°CḡP°C,PsPj P†PeCl̇PrP¶PμPIP°^B (PíPs
120 PjPi PePsP¶PSC- 4 C,PëP¶PSC- (Q4W)).

P†PjCíPSPsPiPμPSPSC-Cl̇C,CH

P' PeP»C-PSC-C‡PSPëC... PrPsCl̇P»C-PrP¶PμPSPSCḡC... PSPμ P±CíP»Ps PIPëCl̇PIP»PμPSPs
PSPμPNḡC,CḡP°P»C-P·CíCHC‡PëC... P°PSC,PëC,C-P» PrPs PrPμPSPsCl̇CíPjP°P±Cí Cí
PíP°C†C-C"PSC,C-PI C-P· CḡPsP·PIPëPSPμPSPsCH Cl̇C,P°PrC-C"CH CḡP°PeCí P°P±Ps

PiC-PiP°PSC,PsPeP»C-C,PëPSPSPsCᖃ PiCfC...P»PëPSPsCᖃ PeC-CfC,PsPe. PᖃCᖃPë
P·P°CfC,PsCfCfPIP°PSPSC- C-PjCfPSPsC,,PᖃCᖃPjPᖃPSC,PSPsPiPs P°PSP°P»C-P·Cf < 1 %
PİP°C†C-C”PSC,C-PI, CᖃPeC- PsC,CᖃPëPjCfPIP°P»Pë PrPᖃPSPsCfCfPjP°P± PrPs 3 CᖃPsPeC-PI,
P±CfP»Pë PiPsP·PëC,PëPIPSPëPjPë C%oPsPrPs PSPᖃPSPᖃPᖃC,CᖃP°P»C-P·CfCᖃC†PëC...
P·Piᖃᖃ™ CᖃP·CfCᖃC†PëC... P°PSC,PëC,C-P» P±PᖃP· PrPsPeP°P·C-PI PiPsCᖃCfCᖃPᖃPSPsC—
C,,P°CᖃPjP°PePsPeC-PSPᖃC,PëPePë, C,PsPeCfPëC†PSPsCfC,C- P°P±Ps PeP»C-PSC-C†PSPsC—
CᖃPᖃP°PeC†C-C—.

PᖃP»C-PSC-C†PSP° PᖃC,,PᖃPeC,PëPIPSC-CfC,Cᖃ C,P° P±PᖃP·PİPᖃPeP° Cf PİP°C†C-C”PSC,C-PI
P· PjPᖃC,P°CfC,P°P·P°PjPë CfPsP»C-PrPSPëC... PİCfC...P»PëPS PI PeC-CfC,PePë

P·C,,PᖃPeC,PëPIPSC-CfC,Cᖃ C,P° P±PᖃP·PİPᖃPeP° PİCᖃPᖃPİP°CᖃP°C,Cf P†PeCfPᖃPᖃPᖃPİP°^{B®} PI
PrPsP·C- 120 PjPi PİC-CfP»Cᖃ PİC-PrCᖃPeC-CᖃPSPsPiPs PİPᖃPᖃPᖃPSPSCᖃ PePsPᖃPSC-
4 C,PëPᖃPSC- P°P±Ps P·PsP»PᖃPrCᖃPsPSPsPiPsC— PePëCfP»PsC,Pë PI PrPsP·C- 4 PjPi
(PePsCᖃPᖃPeC†C-Cᖃ PrPsP·Pë PİCᖃPë PİPsPiC-CᖃCᖃPᖃPSC-PᖃC,,CfPSPeC†C-C— PSPëCᖃPsPe)
PİC-CfP»Cᖃ PİPSCfC,CᖃC-CᖃPSCᖃPsPİPᖃPSPSPsPiPs PİPᖃPᖃPᖃPSPSCᖃ PePsPᖃPSC-
4 C,PëPᖃPSC- PİPsCᖃC-PİPSCᖃPİP°P»PëCfCᖃ PI C,CᖃCᖃPsC...
CᖃP°PSPᖃPsPjC-P·PsPİP°PSPëC..., PİPsPrPIC-PᖃPSPs CfP»C-PİPëC..., P°PeC,PëPIPSPs
PePsPSC,CᖃPsP»CᖃPsPİP°PSPëC... PrPsCfP»C-PrPᖃPᖃPSPSCᖃC... Cf PİP°C†C-C”PSC,C-PI,
CᖃPeC- CᖃP°PSC-CᖃPᖃ PSPᖃ PsC,CᖃPëPjCfPIP°P»Pë PİPSCfC,CᖃC-CᖃPSCᖃPsPİPᖃPSPSPs
P±C-C,,PsCfC,,PsPSP°C, C- PjP°P»Pë PİC-P·PSCᖃ CfC,P°PrC-Cᖃ P·P»PsCᖃPeC-CfPSPsC—
PİCfC...P»PëPSPë P·CfCᖃP°PᖃPᖃPSPSCᖃPj PeC-CfC,PsPe: PrPsCᖃPsCfP»C- P·CᖃP°PePsPj
PjPsP»PsC†PSPsC— P·P°P»PsP·Pë (PrPsCfP»C-PrPᖃPᖃPSPSCᖃ 1), C-PSCᖃC- CfPsP»C-PrPSC-
PİCfC...P»PëPSPë P°P±Ps PjC-C”P»PsPjPSP° C...PİPsCᖃPsP±P° (PrPsCfP»C-PrPᖃPᖃPSPSCᖃ 2)
C,P° CᖃP°Pe PİPᖃCᖃPᖃPrPjC-C...CfCᖃPsPiPsC— P·P°P»PsP·Pë, CᖃPᖃP·PëCfC,PᖃPSC,PSPëPᖃ PrPs
PeP°CfC,CᖃP°C†C-C— (PrPsCfP»C-PrPᖃPᖃPSPSCᖃ 3). Pj C†PëC... P°PeC,PëPIPSPs
PePsPSC,CᖃPsP»CᖃPsPİP°PSPëC... PeP»C-PSC-C†PSPëC... PrPsCfP»C-PrPᖃPᖃPSPSCᖃC...
P±PᖃP·PİPᖃPeP° PsC†C-PSCᖃPİP°P»P°CfCᖃ Cf 5931 C...PİPsCᖃPsPiPs. PᖃP°C†C-C”PSC,Pë P·
PsCfC,PᖃPsPSPᖃPeCᖃPsP·PsPj C%oPᖃP»PᖃPİPë (PᖃPᖃP©) PI P°PSP°PjPSPᖃP·C- P°P±Ps
PsCfC,PᖃPsPjC-C”P»C-C,PsPj C%oPᖃP»PᖃPİPë, PİP°C†C-C”PSC,Pë P· P°PeC,PëPIPSPëPj
P·P°C...PİPsCᖃCᖃPİP°PSPSCᖃPj P·CfP±C-PI P°P±Ps C%oPᖃP»PᖃPİ, CᖃPePëPj
PSPᖃPsP±C...C-PrPSPᖃ CfC,PsPjP°C,PsP»PsPiC-C†PSPᖃ C...C-CᖃCfCᖃPiC-C†PSPᖃ
PIC,CᖃCfC†P°PSPSCᖃ, PİP°C†C-C”PSC,Pë, Cf CᖃPePëC... PSPᖃ P·P°PiPsC—P»PëCfCᖃ CᖃP°PSPë
PİC-CfP»Cᖃ CfC,PsPjP°C,PsP»PsPiC-C†PSPsPiPs PIC,CᖃCfC†P°PSPSCᖃ/
C...C-CᖃCfCᖃPiC-C†PSPsPiPs PIC,CᖃCfC†P°PSPSCᖃ PI CᖃPsC,PsPIC-Pᖃ PİPsCᖃPsPᖃPSPëPSC-,
P°P±Ps PİP°C†C-C”PSC,Pë P· P±CfPrCᖃ-CᖃPePëPjPë P·P°PİP»P°PSPsPİP°PSPëPjPë
C-PSPİP°P·PëPIPSPëPjPë PİCᖃPsC†PᖃPrCfCᖃP°PjPë PSPᖃ PIC-PrPİPsPIC-PrP°P»Pë
PeCᖃPëC,PᖃCᖃC-CᖃPj PrP»Cᖃ PİPeP»CᖃC†PᖃPSPSCᖃ PI C†C- PrPsCfP»C-PrPᖃPᖃPSPSCᖃ.
PᖃPᖃCᖃPİPëPSPSC- C,P° PrPsPrP°C,PePsPIC- PeC-PSC†PᖃPIC- C,PsC†PePë PsC†C-PSCᖃPİP°P»Pë
PİPsCᖃPICᖃ PsPrPSC-C”C— P°P±Ps P±C-P»CᖃCᖃPᖃ PeC-CfC,PePsPİPëC... PİPsPrC-Pᖃ (PᖃPᖃ).
P’ PrPsCfP»C-PrPᖃPᖃPSPSCᖃC..., CᖃPeC- PrPᖃPjPsPSCfC,CᖃCfCᖃ,Cᖃ P±C-P»CᖃCᖃCf
PᖃC,,PᖃPeC,PëPIPSC-CfC,Cᖃ PİCᖃPᖃPİP°CᖃP°C,Cf P†PeCfPᖃPᖃPᖃPİP°^{B®} PI
PİPsCᖃC-PİPSCᖃPSPSC- C-P· P·PsP»PᖃPrCᖃPsPSPsPiPsCᖃ PePëCfP»PsC,PsCᖃ,
PİP°C†C-C”PSC,P°Pj PİCᖃPsPİPsPSCfPIP°PICfCᖃ PIC-PrPeCᖃPëC,PëPᖃ CᖃPᖃPᖃPᖃPj
P·P°CfC,PsCfCfPIP°PSPSCᖃ PİCᖃPᖃPİP°CᖃP°C,Cf P†PeCfPᖃPᖃPᖃPİP°^{B®} PI
PİPsPİPᖃCᖃPᖃPrPSCᖃPs PİPëP·PSP°C†PᖃPSC-Pᖃ 2-CᖃC-C†PSC-Pᖃ CᖃPsP·CᖃPëCᖃPᖃPSC-Pᖃ
C,,P°P·C- P»C-PeCfPIP°PSPSCᖃ. PᖃPᖃ PİPëP·PSP°C†P°P»PëCfCᖃ C,P°PePëPj C†PëPSPsPj:
PİP°C,PsP»PsPiC-C†PSPëPᖃ PİPᖃCᖃPᖃP»PsPj (PİPᖃCᖃC,PᖃP±CᖃP°P»CᖃPSPëPᖃ C†Pë
PSPᖃPİPᖃCᖃC,PᖃP±CᖃP°P»CᖃPSPëPᖃ), PİCᖃPsPjPᖃPSPᖃPİP° C,PᖃCᖃP°PİC-Cᖃ PeC-CfC,PsPe
(Cf C,,C†. C-P· P·P°CfC,PsCfCfPIP°PSPSCᖃPj CᖃP°PrC-PsC-P·PsC,PsPİC-PI),
C...C-CᖃCfCᖃPiC-C†PSPᖃ PIC,CᖃCfC†P°PSPSCᖃ PSP° PeC-CfC,PeP°C... C†Pë

PePsPjPĩCĤPµCĬC-CĬ CĬPĩPĕPSPSPsPiPs PjPsP·PeCĬ.

PµCĤPµPĩP°CĤP°C, P†PeCĬP†P¶PµPIP°^{B®} P·PSPĕP¶CĬPPIP°PI CĤPĕP·PĕPe CĤPsP·PIPĕC,PeCĬ PĤPµ C- CĤPsP·PIPĕC,PsPe PjPSPsP¶PĕPSPSPĕC... PĤPµ (PĩPµCĤCĕP° C,P° PSP°CĬC,CĬPĩPSC-) CĬ PĩP°C†C-C”PSC,C-PI P· PjPµC,P°CĬC,P°P·P°PjPĕ CĬPsP»C-P†PSPĕC... PĩCĬC...P»PĕPS PI PeC-CĬC,PePĕ (P†PĕPI. C,P°P±P»PĕC†CĤ 1).

PŸP°P±P»PĕC†CĬ 1. P PµP·CĬP»CHĖC,P°C,Pĕ P†PsCĬP»C-P†P¶PµPSPSCĬ PµC,,PµPeC,PĕPIPSPsCĬC,C- CĬ PĩP°C†C-C”PSC,C-PI P· PĩC-P·PSC-PjPĕ CĬC,P°P†C-CĬPjPĕ P·P»PsCĬPeC-CĬPSPĕC... PĩCĬC...P»PĕPS, CĬPeC- CĬCĤP°P¶P°CĤC,CHĖ PeC-CĬC,PePĕ

PĕP°P·PIP° PĩP°C,PsPµPIC-C-/ PµPsPeP°P·PSPĕPe	P°PsCĬP°C-P†P¶PµPSPSCĬ 1, CĤP°Pe PjPsP»PsC†PSPsC- P·P°PµPsP·Pĕ	P°PsCĬP°C-P†P¶PµPSPSCĬ 2, C-PSCEC- CĬPsP»C-P†PSC- PĩCĬC...P»PĕPSPĕ** P°P±Ps PjC-C”PµPsPjPSP° P·P°PµPsP·Pĕ C...PIPSCĤPsP±P°	P°PsCĬP°C-P†P¶PµPSPSCĬ 3, CĤP°Pe PĩPµCĤPµP†PjC-C...CĬCĤPsPiPsC- C...PIPSCĤPsP±P°	PµPsCĕPĕCĤPµPSPĕPNĕ CĤP°Pe (PePsPjP±C-PSPsPIP°PSC- P†P°PSC-)
P PµC†PsPiPĕPSP°	P†PeCĬP†P¶PµPIP° ^{***} P·PsP»PµP†CĤPsPSPsPIP°	P†PeCĬP†P¶PµPIP° ^{***} P·PsP»PµP†CĤPsPSPsPIP°	P†PeCĬP†P¶PµPIP° ^{***} P·PsP»PµP†CĤPsPSPsPIP°	P†PeCĬP†P¶PµPIP° ^{***} P·PsP»PµP†CĤPsPSPsPIP°
N	1026	886	950	2862
PµPµCĤCĕP° PĤPµ PĤPµP†C-P°PSP° C†P°CĬCĬ (PjC-CĬCĬCĬC-) P C-P·PSPĕC†CĬ PjPµP†C-P°PS C†P°CĬCĬ (PjC-CĬCĬCĬC-) P†P (95 % P°P†) / P—P°P (%) 0,82 (0,71; 0,95) / 18 p-P·PSP°C†PµPSPSCĬ PSpµ < 0,0001 ^{as} / 0,0101 ^{as} PjPµPSCĕPsC— PµC,,PµPeC,PĕPIPSPsCĬC,C-/ P±C-P»CHĖCĕPsC— PµC,,PµPeC,PĕPIPSPsCĬC,C- PµCĤPsPiPsCĤC†C-CĬ PĩP°C†C-C”PSC,C-PI (%) PµPµCĤCĕP° P°C P°PSP°CĬC,C†PĩPSC- PĤPµ* PŸPµCĤPµP†PSPCĬ PeC-P»CHĖPeC-CĬC,CHĖ / PĩP°C†C-C”PSC,Pĕ PĤPsPµC,C-C†C-C”PSC, PIC-P†PSPsCĕPµPSPSCĬ (95 % P°P†) / P—P°P (%) p-P·PSP°C†PµPSPSCĬ P±C-P»CHĖCĕPsC— PµC,,PµPeC,PĕPIPSPsCĬC,C- PµPµPµ PI CĤC-Pĕ PµPµCĤCĕP° PĤPµ P°P±Ps P°PµP— PĤPµP†C-P°PSP° C†P°CĬCĬ PĕP° (PjC-CĬCĬCĬC-) P†P (95 % P°P†) / P—P°P (%) 0,82 (0,70; 0,95) / 18 p-P·PSP°C†PµPSPSCĬ P±C-P»CHĖCĕPsC— PµC,,PµPeC,PĕPIPSPsCĬC,C- PµPµCĤCĕPµ PsPĩCĤPsPjC-PSPµPSPSCĬ PeC-CĬC,PsPe PĤPµP†C-P°PSP° C†P°CĬCĬ PĕP° (PjC-CĬCĬCĬC-) P†P (95 % P°P†) / P—P°P (%) 0,74 (0,59; 0,94) / 26 p-P·PSP°C†PµPSPSCĬ P±C-P»CHĖCĕPsC— PµC,,PµPeC,PĕPIPSPsCĬC,C-	1020	890	951	2861
26,4	20,6	16,3	17,1	19,4
P°P’	4,2		3,5	8,2
	0,84 (0,71; 0,98) / 16 0,0007 ^{as} / 0,0619 ^{as}	0,82 (0,71; 0,95) / 18 0,0002 ^{as} / 0,0085 ^{as}		0,83 (0,76; 0,90) / 17 < 0,0001 / < 0,0001
30,7	36,5	31,4	40,6	37,8
0,46	0,60	0,44	0,61	0,57
0,77 (0,66; 0,89) / 23		0,90 (0,77; 1,04) / 10	0,82 (0,71; 0,94) / 18	0,82 (0,75; 0,89) / 18
0,0012 ^{as}		0,1447 ^{as}	0,0085 ^{as}	< 0,0001
0,45	0,58	0,86	0,79	0,69
25,2		1,04	0,83	0,81
		19,0	20,3	26,6
		14,4	17,1	19,4
		0,83 (0,71; 0,97) / 17 0,0215	0,83 (0,72; 0,96) / 17 0,0134	0,83 (0,76; 0,90) / 17 < 0,0001
		PĕP°	PĕP°	PĕP°
		PĕP°	28,6	33,2
		0,78 (0,63; 0,97) / 22 0,0256	0,78 (0,66; 0,94) / 22 0,0071	0,77 (0,69; 0,87) / 23 < 0,0001

PĕP° PĤP° PSPµ P†PsCĬCĬPiPSCĬC,Ps; P°P’ PĤP° P†P°PSC- PIC-P†CĬCĬC,PS-; P°PµP— PĤP°
PiC-PĩPµCĤPeP°P»CHĖC†C-C”PjC-CĬ PĩCĤPĕ P·P»PsCĬPeC-CĬPSC-PNĕ PĩCĬC...P»PĕPSC-;
PµPĤPµ PĤP° PĩPsCĕPĕCĤPµPSC-CĬC,CHĖ PeC-CĬC,PePsPIPĕC... PĩPsP†C-PNĕ; P°P PĤP°
PIC-P†PSPsCĕPµPSPSCĬ CĤPĕP·PĕPeC-PI; P—P°P PĤP° P·PSPĕP¶PµPSPSCĬ
PIC-P†PSPsCĬPSPsPiPs CĤPĕP·PĕPeCĬ

PĤ PŸPePsCĤPµPiPsPIP°PSC- CĤ-P·PSP°C†PµPSPSCĬ PĩCĤPµP†CĬC,P°PIP»PµPSPs P·
P†PsCĬP»C-P†P¶PµPSCĤ 1, 2 C,P° 3 (PĩPµCĤCĕP° PĤPµ, P° C,P°PePsP¶ PeC-PSC†PµPIC-
C,PsC†PePĕ PĩPµCĤCĕPsC— C,P° PSP°CĬC,CĬPĩPSPĕC... PĤPµ). * P’CĤP°C...PsPICĬC” PICĬC-
PeC-CĬC,PePsPIC- PĩPsP†C-C— PI P†PĕPSP°PjC-C†C-; PĩC-P†CĤP°C...PsPICĬCĤC,CHĖCĬCĬ
C,C-P»CHĖPePĕ PĩPsP†C-C—, CĬPeC- PIPĕPSPĕPeP»Pĕ C†PµCĤPµP· ≥ 21 P†PµPSCĤ PĩC-CĬP»CĬ
PĩPsPĩPµCĤPµP†PSCĤPsC— PĩPsP†C-C—.

** P’PeP»CĤC†P°CĤC†Pĕ PĕP°P P> (PSPµP†CĤC-P±PSPsPeP»C-C,PĕPSPSPĕPNĕ CĤP°Pe
P»PµPiPµPSCĤ), PSPĕCĤPePsPiPsPeP»C-C,PĕPSPSPĕPNĕ CĤP°Pe,
PePsP»PsCĤPµPeC,P°P»CHĖPSPĕPNĕ CĤP°Pe, P†CĤC-P±PSPsPeP»C-C,PĕPSPSPĕPNĕ CĤP°Pe
P»PµPiPµPSCĤ, CĤP°Pe CĬPµC†PsPiPsPiPs PjC-C...CĬCĤP°, CĤP°Pe PiPsP»PsPIPĕ C,P° CĕPĕC—,
CĤP°Pe PĕPµPŸ/CĬPµC†PsCĬC,P°C,PµPiPsC— CĬPĕCĬC,PµPjPĕ C,P° C-PSCĕPĕC...
P»PsPeP°P»C-P·P°C†C-PNĕ, P·P° PIPĕPSCĬC,PePsPj CĤP°PeCĬ PjPsP»PsC†PSPsC— P·P°P»PsP·Pĕ

C, P° C₇P°PeC₇ P_iP_μC₇P_μPrP_jC-C...C₇C₇PsPIP_sC— P·P°P»PsP·Pë.

P PëC₇. 1. P“C₇P°C„C-PePë P₇P°P_iP»P°PSP° B₇“ P₇P_μPN₂C”C₇P° PrP»C₇ C₇P°C₇C₇ P_iP_μC₇C₇PsC— P₇P_μ, C₇P_μP° PIPëPSPëP_μP»P° P_iC-Pr C₇P°C₇ PrPsC₇P»C-PrP₇P_μPSPSC₇

P_μC₇PsPiC₇P_μC₇C₇PIP°PSPSC₇ P·P°C...PIP_sC₇C₇PIP°PSPSC₇ C, P° P·P°PiP°P»CH₇PSP° PIPëP₇P_μPIP°PSC-C₇C, CH₇ P_iC₇Pë P_jP_μC, P°C₇C, P°P·P°C... C₇PsP»C-PrPSPëC... P_iC₇C...P»PëPS C₇ PeC-C₇C, PePë

P_μC₇PsPiC₇P_μC₇C₇PIP°PSPSC₇ P·P°C...PIP_sC₇C₇PIP°PSPSC₇ P±C₇P»Ps P°PSP°P»PsPiC-C₇PSPëP_j C₇ PiC₇C₇P_iP°C... P_iC₇P_μP_iP°C₇P°C, C₇ P₇PeC₇PrP₇P_μPIP°^{B®} C, P° P·PsP»P_μPrC₇PsPSPsPIP_sC— PePëC₇P»PsC, Pë PI C₇C₇C-C... C, C₇CH₇PsC... PrPsC₇P»C-PrP₇P_μPSPSC₇C... C, P° PI P_iPsP_iP_μC₇P_μPrPSC₇Ps PIPëP·PSP°C₇P_μPSPsP_jC₇ PsP±B₇[™] C”PrPSP°PSPsP_jC₇ P°PSP°P»C-P·C- C, C₇CH₇PsC... PrPsC₇P»C-PrP₇P_μPSCH₇.

P’ PrPsC₇P»C-PrP₇P_μPSPSC₇C... 1, 2 C, P° 3 P·P°PiP°P»CH₇PSP° PIPëP₇P_μPIP°PSC-C₇C, CH₇ P±C₇P»P° P·C-C₇C, P°PIPSPsC₇ C₇ PiC₇C₇P_iP°C... P_iC₇P_μP_iP°C₇P°C, C₇ P₇PeC₇PrP₇P_μPIP°^{B®} C, P° P·PsP»P_μPrC₇PsPSPsPIP_sC— PePëC₇P»PsC, Pë C₇ P_iP°C₇C-C”PSC, C-PI C-P· P_iPsC₇PeC₇P_μPSPëP_jPë C₇C, P°PrC-C₇P_jPë P·P»PsC₇PeC-C₇PSPëC... P_iC₇C...P»PëPS P· C₇C₇P°P₇P_μPSPSC₇P_j PeC-C₇C, PsPe: P_iP°C₇C-C”PSC, Pë P· C₇P°PePsP_j P_jPsP»PsC₇PSPsC— P·P°P»PsP·Pë (PIC-PrPSPsC₇Pe_μPSPSC₇ C₇PëP·PëPeC-PI [95 % P”P₇] 0,95 [0,81; 1,11]), P_iP°C₇C-C”PSC, Pë P· C₇P°PePsP_j P_iP_μC₇P_μPrP_jC-C...C₇C₇PsPIP_sC— P·P°P»PsP·Pë (PIC-PrPSPsC₇Pe_μPSPSC₇ C₇PëP·PëPeC-PI [95 % P”P₇] 1,03 [0,91; 1,17]) C, P° P_iP°C₇C-C”PSC, Pë P· C-PSC₇Pe_μP_jPë C₇PsP»C-PrPSPëP_jPë P_iC₇C...P»PëPSP°P_jPë P°P±Ps P_jC-C”P»PsP_jPSPsC₇ C...PIP_sC₇PsP±PsC₇ (PIC-PrPSPsC₇Pe_μPSPSC₇ C₇PëP·PëPeC-PI [95 % P”P₇] 0,95 [0,83; 1,08]). *Post-hoc* P°PSP°P»C-P· PI PrPsC₇P»C-PrP₇P_μPSPSC- 2 (P_iP°C₇C-C”PSC, Pë P· C-PSC₇Pe_μP_jPë C₇PsP»C-PrPSPëP_jPë P_iC₇C...P»PëPSP°P_jPë P°P±Ps P_jC-C”P»PsP_jPSPsC₇ C...PIP_sC₇PsP±PsC₇) PIPëP·PSP°C₇P_μPI P·P°PiP°P»CH₇PSC₇ PIPëP₇P_μPIP°PSC-C₇C, CH₇ P_iC₇Pë PSP°C₇PIPSPsC₇C, C-PsPrPSC-C”C— P· 3 C, PëP_iC-PI P_iC₇C...P»PëPS P· PIPëPePsC₇PëC₇C, P°PSPSC₇P_j C₇C, C₇P°C, PëC„C-PeP°C₇C-C— (PSP_μPrC₇C-P±PSPsPeP»C-C, PëPSPSPëP_μ C₇P°Pe P»P_μP_iP_μPSCH₇, P_jC-C”P»PsP_jPSP° C...PIP_sC₇PsP±P° C, P° C-PSC₇C-). P—P°PiP°P»CH₇PSP° PIPëP₇P_μPIP°PSC-C₇C, CH₇ P±C₇P»P° PrPsPIC₇PsC₇ C₇ PiC₇C₇P_iC- P_iC₇P_μP_iP°C₇P°C, C₇ P₇PeC₇PrP₇P_μPIP°^{B®} P_iC₇Pë PSP_μPrC₇C-P±PSPsPeP»C-C, PëPSPSPsP_jC₇ C₇P°PeC₇ P»P_μP_iP_μPSCH₇ (PIC-PrPSPsC₇Pe_μPSPSC₇ C₇PëP·PëPeC-PI [95 % P”P₇] 0,79 [0,65; 0,95]; n = 702), C₇ PiC₇C₇P_iC- P·PsP»P_μPrC₇PsPSPsPIP_sC— PePëC₇P»PsC, Pë P_iC₇Pë P_jC-C”P»PsP_jPSC-PN₂ C...PIP_sC₇PsP±C- (PIC-PrPSPsC₇Pe_μPSPSC₇ C₇PëP·PëPeC-PI [95 % P”P₇] 2,26 [1,13; 4,50]; n = 180) C, P° P°PSP°P»PsPiC-C₇PSPsC₇ C₇ PiC₇C₇P_iC- P_iC₇P_μP_iP°C₇P°C, C₇ P₇PeC₇PrP₇P_μPIP°^{B®} C, P° P·PsP»P_μPrC₇PsPSPsPIP_sC— PePëC₇P»PsC, Pë P_iC₇Pë C-PSC₇Pe_μC... C, PëP_iP°C... P_iC₇C...P»PëPS (PIC-PrPSPsC₇Pe_μPSPSC₇ C₇PëP·PëPeC-PI [95 % P”P₇] 1,08 (0,90; 1,30); n = 894). P_iP_μ PrPsC₇P»C-PrP₇P_μPSPSC₇ PSP_μ PePsPSC, C₇PsP»C₇PIP°P»PsC₇C₇ C°%PsPrPs P_iC₇PsPiPSPsC₇C, PëC₇PSPëC... C„P°PeC, PsC₇C-PI C, P° P_iC₇PsC, PëP_iC₇C...P»PëPSPSPsPiPs P»C-PeC₇PIP°PSPSC₇. P’ PsP±B₇[™] C”PrPSP°PSPsP_jC₇ P_iPsP_iP_μC₇P_μPrPSC₇Ps PIPëP·PSP°C₇P_μPSPsP_jC₇ P°PSP°P»C-P·C- PrPsC₇P»C-PrP₇P_μPSCH₇ 1, 2 C, P° 3 P·P°PiP°P»CH₇PSP° PIPëP₇P_μPIP°PSC-C₇C, CH₇ P±C₇P»P° P°PSP°P»PsPiC-C₇PSPsC₇ C₇

PiC₇Cr₇PiC- PiC₇PuPiP^oC₇P^oC, Cr P⁺PeC₇PrP^oPuPIP^{oB} C, P^o P·PsP»PuPrC₇PsPSPsPIPsC—
PeP₆C₇P»PsC, P₆ (PIC-PrPSPsC₆PuPSPSC₇ C₇P₆P·P₆PeC-PI [95 % P⁺P⁺] 0,99 [0,91; 1,07]).

P'PiP»P₆PI PSP^o P_±C-P»CH₆

P₇P^oC₇ PrPs P·PjPuPSC₆PuPSPSC₇ P_±PsP»C₇ (C, PsP_±C, Ps P·PSP₆P^oPuPSPSC₇ PSP^o
≥ 2 P_±P^oP»P₆ PIC-Pr PiPsC₇P^oC, PePsPIP₆C... P·PSP^oC₇PuPSC₇ P·P^o C₆PeP^oP»PsC₇
PsC₇C-PSPeP₆ P_±PsP»C₇ PjPsPrP₆C,, C-PePsPIP^oPSPsPiPs PePsC₇PsC, PePsPiPs
PsPiP₆C, CrPIP^oP»CH₆PSP₆PeP^o PsC₇C-PSPeP₆ P_±PsP»C₇ [BPI-SF]) P_±CrPI
P^oPSP^oP»PsPiC-C₇PSP₆Pj PrP»C₇ PrPuPSPsC₇CrPjP^oP_±Cr C, P^o P·PsP»PuPrC₇PsPSPsPIPsC—
PeP₆C₇P»PsC, P₆ PI PePsP^oPSPsPjCr PrPsC₇P»C-PrP^oPuPSPSC- C, P^o PI
C-PSC, PuPiC₇PsPIP^oPSP₆C... P^oPSP^oP»C-P·P^oC.... P' *post-hoc* P^oPSP^oP»C-P·C-
PePsPjP_±C-PSPsPIP^oPSP₆C... PrP^oPSP₆C... PjPuPrC-P^oPSP^o C₇P^oC₇Cr PrPs PiPsC₇P₆P»PuPSPSC₇
P_±PsP»C₇ (> 4 P_±P^oP»C-PI PiPsC₇P₆P»PuPSPSC₇ P·P^o C₆PeP^oP»PsC₇ PsC₇C-PSPeP₆
P_±PsP»C₇) Cr PiP^oC₇C-C⁺PSC, C-PI P· P»PuPiPeP₆Pj P_±PsP»PuPj P^oP_±Ps P_±PuP· P_±PsP»C₇ PSP^o
PIP₆C...C-PrPSPsPjCr C₇C-PIPS- P_±CrPI P_±C-P»CH₆C₆P₆Pj PrP»C₇ PiC₇PuPiP^oC₇P^oC, Cr
P⁺PeC₇PrP^oPuPIP^{oB} Cr PiPsC₇C-PIPS₇PSPSC- C-P· P·PsP»PuPrC₇PsPSPsPIPsC₇
PeP₆C₇P»PsC, PsC₇ (198 PiC₇PsC, P₆ 143 PrPSC-PI) (p = 0,0002).

P₇P»C-PSC-C₇PSP^o PuC,, PuPeC, P₆PIPS-Cl₇C, CH₆ Cr PiP^oC₇C-C⁺PSC, C-PI C-P·
PjC-C⁺P»PsPjPSPsC₇ C...PIPsC₇PsP_±PsC₇

Pj PjC-P^oPSP^oC₇PsPrPSPsPjCr C₇P^oPSPrPsPjC-P·PsPIP^oPSPsPjCr (1:1) PiPsPrPIC-PN₆PSPs
C₇P»C-PiPsPjCr P^oPeC, P₆PIPS₆ PePsPSC, C₇PsP»CH₆PsPIP^oPSPsPjCr PrPsC₇P»C-PrP^oPuPSPSC-
PiC₇PuPiP^oC₇P^oC, P⁺PeC₇PrP^oPuPIP^{oB} PiPsC₇C-PIPS₇PIP^oP»P₆ C-P·
P·PsP»PuPrC₇PsPSPsPIPsC₇ PeP₆C₇P»PsC, PsC₇ Cr PiP^oC₇C-C⁺PSC, C-PI C-P· PIPiP₆C₇C₆Pu
PrC-P^oPIPS₆C₇C, PsPIP^oPSPsC₇ PjC-C⁺P»PsPjPSPsC₇ C...PIPsC₇PsP_±PsC₇
(PrPsC₇P»C-PrP^oPuPSPSC₇ 4).

Pj C₇CH₆PsPjCr PrPsC₇P»C-PrP^oPuPSPSC- 1718 PiP^oC₇C-C⁺PSC, C-PI C-P· PjC-C⁺P»PsPjPSPsC₇
C...PIPsC₇PsP_±PsC₇ P·C- C₆PsPSP^oPN₆PjPuPSC₆Pu PsPrPSP₆Pj PeC-C₇C, PePsPIP₆Pj
PIPsPiPSP₆C₆PuPj P_±CrP»P₆ C₇P^oPSPrPsPjC-P·PsPIP^oPSC- PrP»C₇ PiC-PrC₆PeC-C₇PSPsPiPs
PIPIPuPrPuPSPSC₇ PiC₇PuPiP^oC₇P^oC, Cr P⁺PeC₇PrP^oPuPIP^{oB} Cr PrPsP·C- 120 PjPi PePsP^oPSC-
4 C, P₆P^oPSC- (Q4W) C₇P₆ PIPSC₇C, C₇C-C₆PSCH₆PsPIP₆PSPSPsPiPs PIPIPuPrPuPSPSC₇
P·PsP»PuPrC₇PsPSPsPIPsC— PeP₆C₇P»PsC, P₆ Cr PrPsP·C- 4 PjPi PePsP^oPSC- 4 C, P₆P^oPSC-
(PePsC₇PuPeC₇C-C₇ PrPsP·P₆ PiC₇PsPIPsPrP₆P»P^oC₇C₇ P· CrC₇P^oC...CrPIP^oPSPSC₇Pj
C,, CrPSPeC₇C-C— PSP₆C₇PsPe). PuPuC₇PIP₆PSPSPsC₇ PeC-PSC₇PuPIPsC₇ C, PsC₇PePsC₇
PrPsC₇P»C-PrP^oPuPSPSC₇ P_±CrP»P^o PrPuPjPsPSC₇C, C₇P^oC₇C-C₇ PSPuPjPuPSC₆PsC—
PuC,, PuPeC, P₆PIPS₆C₇C, C- PiC₇PuPiP^oC₇P^oC, Cr P⁺PeC₇PrP^oPuPIP^{oB} C₆PsPrPs PiPsC₇PIP₆
PiPuC₇C₆PsC— P₇Pu PiPsC₇C-PIPS₇PSPs C-P· P·PsP»PuPrC₇PsPSPsPIPsC₇
PeP₆C₇P»PsC, PsC₇. P⁺Ps PIC, PsC₇P₆PSPSP₆C... PeC-PSC₇PuPIP₆C... C, PsC₇PsPe
PSP^oP»PuP^oP»P₆ P_±C-P»CH₆C₆ PIP₆C₇PsPeP^o PuC,, PuPeC, P₆PIPS-Cl₇C, CH₆ C₆PsPrPs
C₇P^oC₇Cr PrPs PiPuC₇C₆PsC— P₇Pu, PrPs PiPuC₇C₆PsC— C, P^o PSP^oC₇C, CrPiPSPsC— P₇Pu C-
P·P^oPiP^oP»CH₆PSP^o PIP₆P^oP₆PIP^oPSC-Cl₇C, CH₆. P₇Pu PIP₆P·PSP^oC₇P»P₆C₇C₇ C, P^oPeP₆Pj
C₇P₆PSPsPj: PiP^oC, PsP»PsPiC-C₇PSP₆PN₆ PiPuC₇PuP»PsPj (PIPuC₇C, PuP_±C₇P»P»CH₆PSP₆PN₆
C₇P₆PSPuPIPuC₇C, PuP_±C₇P»P»CH₆PSP₆PN₆), PiC₇PsPjPuPSPuPIP^o C, PuC₇P^oPiC-C₇
PeC-C₇C, PsPe (Cr C,, C₇. C-P· P·P^oC₇C, PsC₇CrPIP^oPSPSC₇Pj C₇P^oPrC-PsC-P·PsC, PsPiC-PI),
C...C-C₇CrC₇PiC-C₇PSPu PIC, C₇CrC₇P^oPSPSC₇ PSP^o PeC-C₇C, PeP^oC... C₇P₆
PePsPjPiC₇PuC₇C-C₇ Cl₇PiP₆PSPSPsPiPs PjPsP·PeC₇.

P' PsP_±PsC... PiC₇CrPiP^oC... PrPsC₇P»C-PrP^oPuPSPSC₇ 54,5 % PiP^oC₇C-C⁺PSC, C-PI PjP^oP»P₆
PiC₇PsPN₆C, P₆ P^oPIC, PsP»PsPiC-C₇PSC₇ C, C₇P^oPSC₇PiP»P^oPSC, P^oC₇C-C₇

СГГ,PsPIP±CfCГPsPIPëC... PeP»C-C,PëPS PiCfPiPsPIPëPSPSPsC— PeCГPsPIC- (PBSC), 95,8 % PIPëPePsCГPëCГГ,PsPICfPIP°P»Pë/ PiP»P°PSCfPIP°P»Pë PIPëPePsCГPëCГГ,PsPICfPIP°C,Pë PSPsPIPëPNë PiCГPsC,PëPjC-C”P»PsPjPSPëPNë PiCГPµPiP°CГP°C, (P±PsCГC,PµP·PsPjC-P±, P»PµPSP°P»C-PrPsPjC-Pr C±Pë C,P°P»C-PrPsPjC-Pr) CГPe C,PµCГP°PiC-CГ PiPµCГCëPsC— P»C-PSC-C—, P° 60,7 % PIP¶Pµ PjP°P»Pë PµPµ CГP°PSC-CëPµ. P’ PsP±PsC... PiCГCfPiP°C... PeC-P»CHPeC-CГГ,CH PiP°CГC-C”PSC,C-PI C-P· PjC-C”P»PsPjPSPsCГ C...PIPsCГPsP±PsCГ PSP° CГГ,P°PrC-C— P†, P†P† C,P° P†P†P† P·P° PµC-P¶PSP°CГPsPrPSPsCГ CГPëCГГ,PµPjPsCГ CГГ,P°PrC-CГPIP°PSPSCГ (ISS) PSP° PjPsPjPµPSC, PIPëP·PSP°C±PµPSPSCГ PrC-P°PiPSPsP·Cf CГГ,P°PSPsPIPëP»P° 32,4 %, 38,2 % C,P° 29,3 % PIC-PrPiPsPIC-PrPSPs.

РµРµPrC-P°PSP° PeC-P»CHPePsCГГ,C- PIPµPrPµPSPëC... PrPsP· CГГ,P°PSPsPIPëP»P° 16 PrP»CГ PiCГPµPiP°CГP°C,Cf P†PeCГPrP¶PµPIP°^{B®} C,P° 15 вГ “ PrP»CГ P·PsP»PµPrCГPsPSPsPIPsC— PePëCГP»PsC,Pë.

P PµP·CfP»CHC,P°C,Pë PµC,,PµPeC,PëPIPSPsCГГ,C- Cf PrPsCГP»C-PrP¶PµPSPSC- 4 PiCГPµPrCГГ,P°PIP»PµPSPs PSP° CГPëCГГCfPSPeCf 2 C,P° Cf C,P°P±P»PëCГC- 2.

P PëCГГ. 2. P”CГP°C,,C-PëPë PµP°PiP»P°PSP° вГ “ РµРµPNëC”CГP° PrP»CГ C±P°CГCf PrPs PiPµCГCëPsC— PµPµ, C%oPs PIPëPSPëPeP»P° Cf PiP°CГC-C”PSC,C-PI C-P· PIPiPµCГCëPµ PrC-P°PiPSPsCГГ,PsPIP°PSPsCГ PjC-C”P»PsPjPSPsCГ C...PIPsCГPsP±PsCГ

PÿP°P±P»PëCГCГ 2. P PµP·CfP»CHC,P°C,Pë PµC,,PµPeC,PëPIPSPsCГГ,C- PrP»CГ PiCГPµPiP°CГP°C,Cf P†PeCГPrP¶PµPIP°^{B®} PiPsCГC-PIPSCГPSPs C-P· P·PsP»PµPrCГPsPSPsPIPsCГ PePëCГP»PsC,PsCГ Cf PiP°CГC-C”PSC,C-PI C-P· PIPiPµCГCëPµ PrC-P°PiPSPsCГГ,PsPIP°PSPsCГ PjC-C”P»PsPjPSPsCГ C...PIPsCГPsP±PsCГ

РµPsPeP°P·PSPëPe	P†PeCГPrP¶PµPIP° ^{B®} (N = 859)	P—PsP»PµPrCГPsPSPsPIP° PePëCГP»PsC,P° (N = 859)
РµPµCГCëP° PµPµ		
РµC-P»CHPeC-CГГ,CH PiP°CГC-C”PSC,C-PI P· PµPµ (%)	376 (43,8)	383 (44,6)
РµРµPrC-P°PSP° C±P°CГCf PrPs PµPµ (PjC-CГCГCГC-)	22,8 (14,7; PkPh)	23,98 (16,56; 33,31)
P’C-PrPSPsCëPµPSPSCГ CГPëP·PëPeC-PI (95 % P”P†)	0,98 (0,85; 1,14)	
РµPµCГCëP° C,P° PSP°CГГ,CfPiPSC- PµPµ		
PÿPµCГPµPrPSCГ PeC-P»CHPeC-CГГ,CH PiPsPrC-PNë/PiP°CГC-C”PSC,	0,66	0,66
РµPsPµC,,C-CГC-C”PSC, PIC-PrPSPsCëPµPSPSCГ (95 % P”P†)	1,01 (0,89; 1,15)	
РµPsCëPëCГPµPSC-CГГ,CH PeC-CГГ,PePsPIPëC... PiPsPrC-PNë PI CГC-Pe	0,61	0,62

PrPsCfP»C-PrP¶PµPSPSC¶, Cr C¶PePëC... CfP¶PsCfC,PµC¶C-PiP°P»P°CfC¶
P¶PsC±P°C,PePsPiP° PIC-PrP¶PsPIC-PrCH PSP° P·P°CfC,PsCfCfP¶PSPSC¶
P¶C¶PµP¶P°C¶P°C,Cr P¶PeCfP¶P¶PµPIP°^B (PSP°P¶C¶PëPeP»P°Pr, Cr C¶P°P·C-
C¶PµC¶PëPrPëPICr P·P°C...PIPSc¶CHPIP°PSPSC¶).

P°PsCfP»C-PrP¶PµPSPSC¶ 5 PIPeP»CHC±P°P»Ps 37 PrPsC¶PsCfP»PëC... P¶P°C¶C-C°PSC,C-PI P·
PiC-CfC,PsP»PsPiC-C±PSPs PiC-PrC,P¶PµC¶P¶PµPSPëPjPë
PSPµC¶PµP·PµPeC,P°P±PµP»CHPSPëPjPë P°P±Ps C¶PµC¶PëPrPëPICrCHC±PëPjPë
PiC-PiP°PSC,PsPeP»C-C,PëPSPSPëPjPë PiCfC...P»PëPSP°PjPë PeC-CfC,PsPe. PhCfPSPsPIPSPsCH
PeC-PSC¶PµPIPSc¶ C,PsC±PePsCH PrPsCfP»C-PrP¶PµPSPSC¶ P±CfP»P°
PsP±b¶TM C°PeC,PëPIPSP° PIC-PrP¶PsPIC-PrCH Cr P¶P°C¶C-C°PSC,C-PI, C¶PeP°
PIPëP·PSP°C±P°P»P°CfC¶ C¶Pe PµP»C-PjC-PSP°C¶C-C¶ PiC-PiP°PSC,CfCHPePëC...
PeP»C-C,PëPS PiC¶PëPSP°P¶PjPSC- PSP° 90 % P¶PsC¶C-PIPSC¶PSPs P· PIPëC...C-PrPSPëPj
C¶C-PIPSPµPj (P°P±Ps P¶PsPIPSP° PµP»C-PjC-PSP°C¶C-C¶ PiC-PiP°PSC,CfCHPePëC...
PeP»C-C,PëPS, C¶PeC%Ps C—C...PSC¶ C±P°CfC,PeP° CfC,P°PSPsPIPëP»P° PjPµPSCëPµ 5 %
PiCfC...P»PëPSPSPëC... PeP»C-C,PëPS), P°P±Ps C¶Pe PIC-PrCfCfC,PSC-CfC,CH
PiC¶PsPiC¶PµCfCfP¶P°PSPSC¶ C¶C-P»CHPsPiPsPiPs PiCfC...P»PëPSPSPsPiPs
PsCfPµC¶PµPrPeCr, PiC-PrC,P¶PµC¶P¶PµPSP° C¶PµP·CfP»CHC,P°C,P°PjPë
C¶PµPSC,PiPµPSPsP»PsPiC-C±PSPsPiPs PrPsCfP»C-PrP¶PµPSPSC¶ PI C¶P°P·C-
PIC-PrCfCfC,PSPsCfC,C- PrP°PSPëC... PiC-CfC,PsPiP°C,PsP»PsPiC-C±PSPsPiPs
PrPsCfP»C-PrP¶PµPSPSC¶. P— 35 P¶P°C¶C-C°PSC,C-PI, PIPeP»CHC±PµPSPëC... PI P°PSP°P»C-P·
PµC,,PµPeC,PëPIPSsCfC,C-, 85,7 % (95 % P°P¶: 69,7; 95,2) PIC-PrP¶PsPIC-PrP°P»Pë PSP°
P»C-PeCfP¶P°PSPSC¶ PiC¶PµP¶P°C¶P°C,PsPj P¶PeCfP¶P¶PµPIP°^B. P¶C¶PëC,PµC¶C-C—
PIC-PrP¶PsPIC-PrC- PSP° P»C-PeCfP¶P°PSPSC¶ P·P°PrPsPiPsP»CHPSC¶P»Pë PICfC-
20 P¶P°C¶C-C°PSC,C-PI (100 %), Cr C¶PePëC... P±CfP»Pë PsC,C¶PëPjP°PSC- PrP°PSC-
PiC-CfC,PsPiP°C,PsP»PsPiC-C±PSPsPiPs PrPsCfP»C-PrP¶PµPSPSC¶. P— 15 P¶P°C¶C-C°PSC,C-PI,
C¶PeC- P·P°P»PëCëPëP»PëCfC¶, 10 (67 %) PSPµ P¶PsPeP°P·P°P»Pë
PiC¶PsPiC¶PµCfCfP¶P°PSPSC¶ C¶C-P»CHPsPiPsPiPs PiCfC...P»PëPSPSPsPiPs
PsCfPµC¶PµPrPeCr P·P° C¶PµP·CfP»CHC,P°C,P°PjPë C¶PµPSC,PiPµPSPsP»PsPiC-C±PSPëC...
PrPsCfP»C-PrP¶PµPSC¶.

P°PsCfP»C-PrP¶PµPSPSC¶ 6 PIPeP»CHC±P°P»Ps 535 PrPsC¶PsCfP»PëC... P°P±Ps
PiC-PrP»C-C,PeC-PI P· PrPsP·C¶C-P»PsCH PeC-CfC,PePsPiPsCH CfPëCfC,PµPjPsCH, C¶PeC-
PjP°CHC,CH PiC-PiP°PSC,PsPeP»C-C,PëPSPSCr PiCfC...P»PëPSCr PeC-CfC,PsPe. P°C-Pe 28
P¶P°C¶C-C°PSC,C-PI C-P· C¶C-C°C— PiC¶CfP¶Pë CfC,P°PSPsPiPëPI PIC-Pr 12 PrPs
17 C¶PsPeC-PI. P¶P°C¶C-C°PSC,Pë P±CfP»Pë C¶PsP·P¶PsPrC-P»PµPSC- PrPs PsPrPSC-C°C— P·
C,C¶CHPsC... PePsPiPsC¶C,: PrPs PePsPiPsC¶C,Pë 1 PIC...PsPrPëP»Pë PiP°C¶C-C°PSC,Pë P·
PSPµPsPiPµC¶P°P±PµP»CHPSPëPj P·P°C...PIPSc¶CHPIP°PSPSC¶Pj (PSP°P¶C¶PëPeP»P°Pr,
PeC¶PëP¶PsPIC-, C...C¶PµP±PµC,PSC- P°P±Ps PjPSPsP¶PëPSPSC- PiCfC...P»PëPSPSC-
PsCfPµC¶PµPrPePë, P·PsPeC¶PµPjP° P· PjPµC,P°CfC,P°P·P°PjPë PI P»PµPiPµPSC-); PrPs
PePsPiPsC¶C,Pë 2 PIC...PsPrPëP»Pë P¶P°C¶C-C°PSC,Pë P· PsPiPµC¶P°P±PµP»CHPSPëPj
P·P°C...PIPSc¶CHPIP°PSPSC¶Pj, Cr C¶PePëC... P·P°PiP»P°PSPsPiP°PSPµ
C...C-C¶CfC¶PiC-C±PSPµ PIC,C¶CfCfP°PSPSC¶ PiPsPiP¶TM C¶P·CfP¶P°P»PsCfC¶ P·
C,C¶P¶PePëPjPë PSP°CfP»C-PrPeP°PjPë (PSP°P¶C¶PëPeP»P°Pr, C¶PµP·PµPeC¶C-C¶
CfCfPiP»PsP±P°, P°PjPiCfC,P°C¶C-C¶ PeC-PSC¶C-PIPePë P°P±Ps
PiPµPjC-PiPµP»CHPIPµPeC,PsPjC-C¶); PrPs PePsPiPsC¶C,Pë 3 PIC...PsPrPëP»Pë
P¶P°C¶C-C°PSC,Pë, C¶PeC- PiPµC¶PµPNëCëP»Pë PI C¶Pµ PrPsCfP»C-PrP¶PµPSPSC¶
PiC-CfP»C¶ CrC±P°CfC,C- PI PrPsCfP»C-PrP¶PµPSPSC- 5. P°PsP»PsPIPSP° PjPµC,P°
PiPsP»C¶PiP°P»P° PI PsC¶C-PSC¶PIP°PSPSC- PiC¶PsC,,C-P»CH P±PµP·PiPµPePë
PrPµPSPsCfCfPjP°P±Cf Cr P¶P°C¶C-C°PSC,C-PI C-P· PiC-PiP°PSC,PsPeP»C-C,PëPSPSPsCH
PiCfC...P»PëPSPsCH PeC-CfC,PsPe. P°Ps PIC,PsC¶PëPSPSPëC... PeC-PSC¶PµPIPëC... C,PsC±PsPe

PrPsCfP»C-PrP¶PµPSPSC¶PSP°P»PµP¶P°P»Pë: PrP»C¶P PePsPiPsC¶C,Pë 1 бґ” C¶P°Cf PrPs PiC¶PsPiC¶PµCfCfPIP°PSPSC¶P P·P°C...PIPsC¶C¶PIP°PSPSC¶P (P·P° PsC†C-PSPePsC¶ PrPsCfP»C-PrPSPëPeP°); PrP»C¶P PePsPiPsC¶C,Pë 2 бґ” C¶P°CfC,PeP° PiP°C†C-C”PSC,C-PI, C¶PePëPj PrPs 6-PiPs PjC-CfC¶C†C¶PSPµ PiC¶PsPIPsPrPëP»Pë P¶PsPrPSPsPiPs C...C-C¶CfC¶PiC-C¶PSPsPiPs PIC,C¶CfC¶P°PSPSC¶P.

P—P° C¶PµP·CfP»CHC,P°C,P°PjPë P·P°PeP»C¶C¶PSPsPiPs P°PSP°P»C-P·Cf PrP°PSPëC... Cf PePsPiPsC¶C,C- 1 PiC¶PsPiC¶PµCfCfPIP°PSPSC¶P P·P°C...PIPsC¶C¶PIP°PSPSC¶P P·P°C,,C-PeCfPsPIP°PSPs Cf 28 C-P· 260 PiP°C†C-C”PSC,C-PI, C¶PeC- PsC,C¶PëPjP°P»Pë P»C-PeCfPIP°PSPSC¶P (10,8 %). Pj PePsPiPsC¶C,C- 2 PrPs PjC-CfC¶C†C¶PSPµ PiC¶PsPIPsPrPëP»Pë C...C-C¶CfC¶PiC-C¶PSPµ PIC,C¶CfC¶P°PSPSC¶P Cf 219 P· 238 (92,0 % P”P†, 95 % P”P†: 87,8 %, 95,1 %) PiP°C†C-C”PSC,C-PI, C¶PeC- PiC-PrP»C¶PIP°C¶C,CH PsC†C-PSC¶PIP°PSPSC¶C C- C¶PePëPj PiC¶PsPIPsPrPëP»Pë P»C-PeCfPIP°PSPSC¶P PiC¶PµPiP°C¶P°C,PsPj P†PeCfPrP¶PµPIP°^Б. Pj PePsPiPsC¶C,C- 2 Cf 82 (34,3 %) P· 239 PiP°C†C-C”PSC,C-PI, Cf C¶PePëC... PSP° PIPëC...C-PrPSPsPjCf C¶C-PIPSC- P°P±Ps PI PiPµC¶C-PsPr CfC¶P°CfC,C- PI PrPsCfP»C-PrP¶PµPSPSC- C†C-P»CHPsPIPëPNë PiCfC...P»PëPSPSPëPNë PsCfPµC¶PµPrPsPe P»PsPeP°P»C-P·CfPIP°PICfC¶PSPµ PI P»PµPiPµPSC¶C... C- PSPµ PI Pjбґ” C¶PePëC... C,PeP°PSPëPSP°C..., C...C-C¶CfC¶PiC-C¶PSPµ PIC,C¶CfC¶P°PSPSC¶P PiC-Pr C¶P°Cf PrPsCfP»C-PrP¶PµPSPSC¶P PSPµ PiC¶PsPIPsPrPëP»PsCfC¶P. P—P°PiP°P»PsPj PsC,C¶PëPjP°PSC- C¶PµP·CfP»CHC,P°C,Pë PµC,,PµPeC,PëPIPSPsCfC,C- PI PiC-PrP»C-C,PeC-PI C-P· PrPsP·C¶C-P»PsC¶ PeC-CfC,PePsPIPsC¶ CfPëCfC,PµPjPsC¶ C- PrPsC¶PsCfP»PëC... P±CfP»Pë CfC...PsP¶PëPjPë.

Pj PrPsCfP»C-PrP¶PµPSPSC¶P 7 P±CfP»Ps P·P°P»CfC¶PµPSPs 85 PrPsC¶PsCfP»PëC... PiP°C†C-C”PSC,C-PI, C¶PeC- C¶P°PSC-CëPµ P±C¶P°P»Pë CfC¶P°CfC,CH Cf PrPsCfP»C-PrP¶PµPSPSC- 6 C- P·P°PIPµC¶CëPëP»Pë PNëPsPiPs. PµP°C†C-C”PSC,P°Pj PrPsP·PIPsP»C¶P»PsCfC¶P PsC,C¶PëPjCfPIP°C,Pë PrPµPSPsCfCfPjP°P± PrP»C¶P P»C-PeCfPIP°PSPSC¶P PiC-PiP°PSC,PsPeP»C-C,PëPSPSPsC— PiCfC...P»PëPSPë PeC-CfC,PePë, CfCfC- PiP°C†C-C”PSC,Pë PiPµC¶PµP±CfPIP°P»Pë PiC-Pr CfPiPsCfC,PµC¶PµP¶PµPSPSC¶Pj PiC¶PsC,C¶PiPsPj 5 C¶PsPeC-PI. PhCfPSPsPIPSPsC¶ PjPµC,PsC¶ P±CfP»Ps PsC†C-PSPëC,Pë PrPsPIPiPsCfC,C¶PsPePsPIPëPNë PiC¶PsC,,C-P»CH P±PµP·PiPµPePë P·P°CfC,PsCfCfPIP°PSPSC¶P PrPµPSPsCfCfPjP°P±Cf PrP»C¶P PiP°C†C-C”PSC,C-PI C-P· PiC-PiP°PSC,PsPeP»C-C,PëPSPSPsC¶ PiCfC...P»PëPSPsC¶ PeC-CfC,PePë.

P’PiP»PëPI PSP° P±C-P»CH

Pj P·P°PeP»C¶C¶PSPsPjCf P°PSP°P»C-P·C- PrP°PSPëC... PI PsP±бґ” C”PrPSP°PSC-PNë PiC¶CfPiC- P· 1-C— C,P° 2-C— PePsPiPsC¶C, PiPsPIC-PrPsPjP»C¶P»PsCfC¶P PiC¶Ps PeP»C-PSC-C¶PSPs CfCfC,C,C”PIPµ P·PjPµPSCëPµPSPSC¶P CfPëP»CHPSPsPiPs P±PsP»C¶ (C,PsP±C,Ps P·PSPëP¶PµPSPSC¶P PSP° ≥ 2 P±P°P»Pë PIC-Pr PIPëC...C-PrPSPsPiPs C¶C-PIPSC¶P) Cf 30,8 % PiP°C†C-C”PSC,C-PI PiC¶CfPiPë C¶PëP·PëPeCf (C,PsP±C,Ps Cf C,PëC..., C...C,Ps PjP°PI PSP°PNëPiC-C¶CëPëPNë P±P°P» P·P° CëPeP°P»PsC¶ CfPëP»CHPSPsPiPs P±PsP»C¶ ≥ 2 PIC-Pr PIPëC...C-PrPSPsPiPs C¶C-PIPSC¶P) PiC¶PsC,C¶PiPsPj 1 C,PëP¶PSC¶P P»C-PeCfPIP°PSPSC¶P C,P° ≥ 50 % PSP° 5 C,PëP¶PSC-. PjPµ PiPsCfP»P°P±P»PµPSPSC¶P P±PsP»C¶ PiC-PrC,C¶PëPjCfPIP°P»PsCfC¶P PI CfCfC-C... PSP°CfC,CfPiPSPëC... PsC†C-PSPeP°C....

P”C-C,Pë

P,,PIC¶PsPiPµPNëCfCHPePµ P°PiPµPSC,CfC,PIPs P»C-PeP°C¶CfCHPePëC... P·P°CfPsP±C-PI C,PëPjC¶P°CfPsPIPs CfC,C¶PëPjP°P»PsCfCH PIC-Pr P·PsP±PsPiбґ” C¶P·P°PSPSC¶P PiPµC¶PµPrP°PIP°C,Pë C¶PµP·CfP»CHC,P°C,Pë PrPsCfP»C-PrP¶PµPSC¶ P·P°CfC,PsCfCfPIP°PSPSC¶P PiC¶PµPiP°C¶P°C,Cf P†PeCfPrP¶PµPIP°^Б Cf PICfC-C...

PiC-PrPiC7CfPiP°C... PrC-C,PuPNe PrP»Cij PiPsPiPuC7PuPrP¶PuPSPSCij PeC-C7C,PePsPIPëC...
PiPsPrC-PNe Cr PiP°C+C-C" PSC,C-PI P· PjPuC,P°C7C,P°P·P°PjPë PI PeC-C7C,PePë C,P° Cr
PiC-PrPiC7CfPiP°C... PrC-C,PuPNe PIC-PePsPj PrPs 12 C7PuPeC-PI PiC7Pë P»C-PeCfPiP°PSPSC-
PiC-PiP°PSC,PsPeP»C-C,PëPSPSPëC... PiC7C...P»PëPS PeC-C7C,PsPe (PrPëPI. C7PsP·PrC-P»
B«PÿPiPsC7C-P± P·P°C7C,PsC7CfPiP°PSPSCij C,P° PrPsP·PëB» PrP»Cij PsC,C7PëPjP°PSPSCij
C-PSC,,PsC7PjP°C+C-C— C%oPsPrPs P·P°C7C,PsC7CfPiP°PSPSCij PrC-C,CijPj).

P' PrPsC7P»C-PrP¶PuPSPSC- 6 PiC7PuPiP°C7P°C, P+PeC7PrP¶PuPIP°B® PsC+C-PSC7PIP°PIC7Cij
PI PiC-PrPiC7CfPiC- P· 28 PiC-PrP»C-C,PeC-PI (PIC-PePsPj PIC-Pr 13 PrPs 17 C7PuPeC-PI) P·
PiC-PiP°PSC,PsPeP»C-C,PëPSPSPëPjPë PiC7C...P»PëPSP°PjPë PeC-C7C,PsPe P·
PrPsP·C7C-P»PsC7 PeC-C7C,PePsPIPsC7 C7PëC7C,PuPjPsC7. P—C7C-P»C-C7C,CH
PIPëP·PSP°C±P°P»P°C7Cij P·P° P·P°PIPµC7C€PuPSPëPj PrPsP·C7C-PIP°PSPSCijPj
C%oPsPSP°PNëPjPuPSC€Pu 1 C,C7CfP±C±P°C7C,PsC— PeC-C7C,PePë (PSP°PiC7PëPeP»P°Pr,
P·P°PeC7PëC,P° PiP»P°C7C,PëPSPeP° PuPiC-C,,C-P·P°C7PSPsPiPs C7PsC7C,Cr
PiP»PuC±PsPIPsC— PeC-C7C,PePë) C,P° PiPsPeP°P·PSPëPePsPj PjP°C7Pë C,C-P»P° ≥ 45 PePi. P'
PsPrPSPsPiPs PiC-PrP»C-C,PeP° P· PSPµPsPiPuC7P°P±PuP»CHPSPëPj
P·P°C...PIPsC7C7PIP°PSPSCijPj (N = 14) PIC-PrP±CfPIC7Cij C7PuC+PëPrPëPI PiC-Pr C±P°C7
PiPsC±P°C,PePsPIPsPiPs P»C-PeCfPiP°PSPSCij. P"Ps PjC-C7CijC+Cij 6 C...C-C7CfC7PiC-C±PSPµ
P»C-PeCfPiP°PSPSCij PSPµ PiC7PsC...PsPrPëP»Pë 13 C-P· 14 PiP°C+C-C" PSC,C-PI P·
PsPiPuC7P°P±PuP»CHPSPëPj P·P°C...PIPsC7C7PIP°PSPSCijPj, Cr CijPePëC...
P·P°PiP»P°PSPsPiP°PSPµ C...C-C7CfC7PiC-C±PSPµ PIC,C7CfC±P°PSPSCij
PiPsPiB7™ CijP·CfPiP°P»PsC7Cij P· C,CijP¶PePëPjPë PSP°C7P»C-PrPeP°PjPë.

PαP°C7PjP°PePsPeC-PSPµC,PëPeP°.

P7P±C7PsC7P±C+C-Cij

PuC-C7P»Cij PiC-PrC€PeC-C7PSPsPiPs PIPiPuPrPuPSPSCij P±C-PsPrPsC7C,CfPiPSC-C7C,CH
C7PeP»P°PrP°P»P° 62 %.

P'C-PsC,C7P°PSC7C,,PsC7PjP°C+C-Cij

P"PuPSPsC7CfPjP°P± C7PeP»P°PrP°C"C,CHC7Cij PIPëPeP»C7C±PSPs P·
P°PjC-PSPsPePëC7P»PsC, C,P° PICfPiP»PuPIPsPrC-PI, CijPe C- PiC7PëC7PsPrPSPëPNë
C-PjCfPSPsPiP»PsP±CfP»C-PS. PÿPsPjCf PjP°P»PsPNëPjPsPIC-C7PSPs, C%oPs PIC-PS P±CfPrPu
PIPëPIPsPrPëC,PëC7Cij C€P»CijC...PsPj PiPuC±C-PSPePsPIPsPiPs PjPuC,P°P±PsP»C-P·PjCf.
P'PIP°P¶P°C"C,CHC7Cij, C%oPs PNëPsPiPs PjPuC,P°P±PsP»C-P·Pj C,P° PIPëPIPuPrPuPSPSCij
PIC-PrP±CfPiP°C7C,CHC7Cij C,PëPjPë P¶ C€P»CijC...P°PjPë, C%oPs C- PeP»C-C7PuPSC7
C-PjCfPSPsPiP»PsP±CfP»C-PSCf, PiC7PëP·PIPsPrCijC±Pë PrPs C7PsP·PiP°PrCf
PSPµPIPµP»PëPePëC... P±C-P»PeC-PI PrPs PsPeC7PuPjPëC... P°PjC-PSPsPePëC7P»PsC,.

P'PëPIPuPrPuPSPSCij

Pj PiP°C+C-C" PSC,C-PI C-P· PiPsC€PëC7PuPSPëPj C7P°PePsPj PiC7Pë
P·P°C7C,PsC7CfPiP°PSPSC- P±P°PiP°C,PsPeC7P°C,PSPëC... PrPsP· PiPs 120 PjPi PePsP¶PSC-
4 C,PëP¶PSC- C7PiPsC7C,PuC7C-PIP°P»PsC7Cij P·P±C-P»CHC€PuPSPSCij
C7PëC7PsPIP°C,PePsPIPsC— PePsPSC+PuPSC,C7P°C+C-C— PrPuPSPsC7CfPjP°P±Cf PjP°PNëP¶Pu
PI 2 C7P°P·Pë, P° C7C-PIPsPiP°P¶PSPëPNë C7C,P°PS PrPsC7CijPiP°PIC7Cij C±PuC7PuP·
6 PjC-C7CijC+C-PI, C%oPs PIC-PrPiPsPIC-PrP°C" PSPµP·P°P»PuP¶PSC-PNe PIC-Pr C±P°C7Cf
C,,P°C7PjP°PePsPeC-PSPµC,PëC+C-. P' PsC7C-P± C-P· PjC-C" P»PsPjPSPsC7
C...PIPsC7PsP±PsC7, CijPeC- PsC,C7PëPjCfPiP°P»Pë 120 PjPi PePsP¶PSC- 4 C,PëP¶PSC-,
PjPuPrC-P°PSPë PjC-PSC-PjP°P»CHPSPëC... P·P°P»PëC€PePsPIPëC...

PePsPSC†PμPSC, CḡP°C†C-PNₑ PIC-PrCḡC-P·PSCḡP»PëCḡCḡ PjPμPSC€ PSC-P¶ PSP° 8 % PSP° 6 C,P° 12 PjC-CḡCḡC†CḡC.... PJ PīP°C†C-C" PSC,C-PI P· PiC-PiP°PSC,PsPeP»C-C,PëPSPSPëPjPë PīCḡC...P»PëPSP°PjPë PeC-CḡC,PsPe, CḡPeC- PsC,CḡPëPjCḡPIP°P»Pë 120 PjPi PePsP¶PSC- 4 C,PëP¶PSC- P· PSP°PIP°PSC,P°P¶CḡPIP°P»CHbPSPsCḡ PrPsP·PsCḡ PSP° 8 C,P° 15 PrPμPSCḡ, CḡC-PIPSPsPIP°P¶PSC- CḡC-PIPSC- PrPsCḡCḡPiP°P»PëCḡCḡ PīCḡPsC,CḡPiPsPj PīPμCḡC€PsPiPs PjC-CḡCḡC†CḡC P»C-PeCḡPIP°PSPSCḡ. PkP° 9 C,P° 49 C,PëP¶PSCḡC... PjPμPrC-P°PSPë PjC-PSC-PjP°P»CHbPSPëC... P·P°P»PëC€PePsPIPëC... PePsPSC†PμPSC, CḡP°C†C-PNₑ PIC-PrCḡC-P·PSCḡP»PëCḡCḡ PjPμPSC€ PSC-P¶ PSP° 9 %. PJ PīP°C†C-C" PSC,C-PI, CḡPeC- PīCḡPëPīPëPSPëP»Pë PsC,CḡPëPjCḡPIP°C,Pë 120 PjPi PePsP¶PSC- 4 C,PëP¶PSC-, CḡPμCḡPμPrPSC-PNₑ PīPμCḡC-PsPr PSP°PīC-PIIPëPIPμPrPμPSPSCḡ CḡC,P°PSPsPIPëPI 28 PrPSC-PI (PrC-P°PīP°P·PsPS: 14bḡ"55 PrPSC-PI).

PḡPSP°P»C-P· PīPsPīCḡP»CḡC†C-PNₑPSPsC— C,,P°CḡPjP°PePsPeC-PSPμC,PëPePë PSPμ PIPeP°P·P°PI PSP° PeP»C-PSC-C†PSPs CḡCḡC,C,C"PIC- P·PjC-PSPë CḡPëCḡC,PμPjPSPsPiPs PIPiP»PëPICḡ PrPμPSPsCḡCḡPjP°P±Cḡ PI CḡC-PIPSPsPIP°P¶PSPsPjCḡ CḡC,P°PSC- P·P°P»PμP¶PSPs PIC-Pr PIC-PeCḡ (18bḡ"87 CḡPsPeC-PI), CḡP°CḡPë/PμC,PSC-C†PSPsC— PīCḡCḡPīPë (PrPsCḡP»C-PrP¶PμPSC- PīP°C†C-C" PSC,Pë P· C,PμPjPSPëPj PePsP»CHbPsCḡPsPj C€PeC-CḡPë, PIPëC...C-PrC†C- P· P>P°C,PëPSCḡCHbPePsC— PḡPjPμCḡPëPePë, PīP°C†C-C" PSC,Pë P°P·C-PNₑCḡCHbPePsPiPs PīPsC...PsPrP¶PμPSPSCḡ C,P° PīCḡPμPrCḡC,P°PIPSPëPePë C"PICḡPsPiPμPsC—PrPSPsC— CḡP°CḡPë), CḡC,P°C,C- PīP°C†C-C" PSC,P° P°P±Ps C,PëPīC-PI CḡPsP»C-PrPSPëC... PīCḡC...P»PëPS C†Pë PSP°CḡPIPSPsCḡC,C- Cḡ PīP°C†C-C" PSC,P° PjC-C" P»PsPjPSPsC— C...PIPSCḡPsP±Pë. P—P±C-P»CHbC€PμPSPSCḡ PjP°CḡPë C,C-P»P° PīPsPIbḡ™ CḡP·CḡPIP°P»PsCḡCḡ P·C- P·PjPμPSC€PμPSPSCḡPj CḡPëCḡC,PμPjPSPsPiPs PIPiP»PëPICḡ C- PSP°PIP°P·PePë. P—PjC-PSPë PSPμ PIPiP°P¶P°P»PëCḡCḡ PeP»C-PSC-C†PSPs CḡCḡC,C,C"PIPëPjPë, PsCḡPeC-P»CHbPePë C,,P°CḡPjP°PePsPrPëPSP°PjC-C†PSC- PμC,,PμPeC,Pë PSP° PsCḡPSPsPIC- PjP°CḡPePμCḡC-PI PeC-CḡC,PePsPIPsPiPs CḡPμPjPsPrPμP»CHbPIP°PSPSCḡ P±CḡP»Pë PIC-PrPīPsPIC-PrPSPëPjPë PI C€PëCḡPsPePsPjCḡ PrC-P°PīP°P·PsPSC- PīPsPeP°P·PSPëPeP° PjP°CḡPë C,C-P»P°.

P>C-PSC-PNₑPSC-CḡC,CHb/PSPμP»C-PSC-PNₑPSC-CḡC,CHb

P" PμPSPsCḡCḡPjP°P± PIC-PrPsP±CḡP°P¶P°PI PSPμP»C-PSC-PNₑPSCḡ C,,P°CḡPjP°PePsPeC-PSPμC,PëPeCḡ PI C€PëCḡPsPePsPjCḡ PrC-P°PīP°P·PsPSC- PrPsP·, P°P»Pμ PjP°PNₑP¶Pμ PrPsP·PsPīCḡPsPīPsCḡC†C-PNₑPSPμ P·P±C-P»CHbC€PμPSPSCḡ PIPiP»PëPICḡ PrP»Cḡ PrPsP· 60 PjPi (P°P±Ps 1 PjPi/PePi) C,P° PIPëC%Pμ. PkPμP»C-PSC-PNₑPSC-CḡC,CHb, PSP°PNₑC-PjPsPIC-CḡPSC-C€Pμ, PīPsPIbḡ™ CḡP·P°PSP° P· PIP°P¶P»PëPIPëPj C€P»CḡC...PsPj PIPëPIPμPrPμPSPSCḡ, PsPīPsCḡPμCḡPμPrPePsPIP°PSPëPj PjC-C€PμPSPSCḡ, CḡPeP° PSP°CḡPëC†CḡC,CHbCḡCḡ, PīCḡPë PSPëP·CHbPePëC... PePsPSC†PμPSC, CḡP°C†C-CḡC....

PkPëCḡPePsPIP° PSPμPrPsCḡC,P°C,PSC-CḡC,CHb

P' PrPsCḡP»C-PrP¶PμPSPSCḡC... PrPμPSPsCḡCḡPjP°P±Cḡ Cḡ PīP°C†C-C" PSC,C-PI (60 PjPi, n = 55 C,P° 120 PjPi, n = 32) P±PμP· PīC-P·PSCḡPsC— CḡC,P°PrC-C— CḡP°PeCḡ, P°P»Pμ P· CḡC-P·PSPëPj CḡC,CḡPīPμPSPμPj C,,CḡPSPeC†C-C— PSPëCḡPsPe, PIPeP»CHbC†P°CHbC†Pë PīP°C†C-C" PSC,C-PI PSP° PrC-P°P»C-P·C-, CḡC,CḡPīC-PSCḡ PSPëCḡPePsPIPsC— PSPμPrPsCḡC,P°C,PSPsCḡC,C- PSPμ PIPiP»PëPIP°PI PSP° C,,P°CḡPjP°PePsPeC-PSPμC,PëPeCḡ PrPμPSPsCḡCḡPjP°P±Cḡ; C,P°PePëPj C†PëPSPsPj, PSPμPjP°C" PSPμPsP±C...C-PrPSPsCḡC,C- PI PePsCḡPμPeC†C-C— PrPsP·Pë PīCḡPë PSPëCḡPePsPIC-PNₑ PSPμPrPsCḡC,P°C,PSPsCḡC,C-. PμCḡPë P»C-PeCḡPIP°PSPSC- PīCḡPμPīP°CḡP°C,PsPj P†PeCḡPrP¶PμPIP°^{B®} PjPsPSC-C,PsCḡPëPSPi PSPëCḡPePsPIPsC— C,,CḡPSPeC†C-C— PSPμ PīPsC,CḡC-P±PμPS.

PμPμC†C-PSPePsPIP° PSPμPrPsCḡC,P°C,PSC-CḡC,CHb

(PrPsC†PμC,P°PeC†PμP»), PIC-PrPjC-C†P°P»PsC†CΠ PrPsPrP°C,PePsPIPμ
P†C†P†P†PSC-C†PμPSPSCΠ C†PμC†C,C† PeC-C†C,PePsPIP†C... PsC†PμC†PμPrPeC-PI C†P°PeC†
PjPsP»PsC†PSPSC— P·P°P»PsP·Pë, P†PμC†PμPrPjC-C...C†C†PμP†PSC— P·P°P»PsP·Pë P°P±Ps
C†P°PeC† P»PμP†PμPSCΠ PIC-PrP†PμPIC-PrPSPs. Pj PjPsPrPμP»C- PjPëC†C- P·
C-PSP†C†PePsPIP°PSPsC† P†C†C...P»PëPSPsC† PjPsP»PsC†PSPSC— P·P°P»PsP·Pë RANK-Fc
P·PSP†PμC†P†P°PI PsP†PμC†PμC†PμPrPePsPIP°PSC† P†PμC†PjPsPSPsPj
P†C†PμP»C-C,,PμC†P°C†C-C† PμP†C-C,PμP»C-C† PjPsP»PsC†PSPSC— P·P°P»PsP·Pë C,P°
P·P°C,C†P†PjC†P†P°PI C,,PsC†PjC†P†P°PSPSCΠ P†C†C...P»PëPSPë.

P†C,P°PSP†P°C†C,PSC- C,PμC†C,Pë PrP»CΠ PIP†P·PSP°C†PμPSPSCΠ P†PμC,PμPSC†C-P°P»C†
P†PμPSPSC,PsPeC†PëC†PSPsC†C,C- PrPμPSPsC†C†PjP°P±C† PSPμ PIP†PePsPSC†P†P°P»PëC†C†,
PsC†PeC-P»C†PePë C,P°PeC- C,PμC†C,Pë PSPμ C” C†PμP»PμPIP°PSC,PSP†PjPë PrP»CΠ
C†C-C”C— PjPsP»PμPeC†P»Pë. PμC†PμC,Pμ PjP°P»PsPμPjPsPIC-C†PSPs, C%Ps
PrPμPSPsC†C†PjP°P± PjP°C” P±C†P†C†C-ΠPeP†Pμ P†PμC,PμPSC†C-P°P»
P†PμPSPSC,PsPeC†PëC†PSPsC†C,C-.

PμP°PSC†PμC†PμP†PμPSPSP†Pμ P†PμC,PμPSC†C-P°P» PrPμPSPsC†C†PjP°P±C† PSPμ
PsC†C-PSC†P†P°PIC†CΠ PI PrPsPIPμPμC,C†P†P†P°P»PëC... PrPsC†P»C-PrPμPμPSPSCΠC... PSP°
C,PIP°C†P†PSP°C....

P’ PrPsC†P»C-PrPμPμPSPSCΠC... C,PsPeC†PëC†PSPsC†C,C- PsPrPSPsPeC†P°C,PSPsC— C,P°
P±P°P†P°C,PsPeC†P°C,PSPëC... PrPsP· PSP° CΠPIP°PSC†C†PePëC... PjP°PeP°PeP°C... PrPsP·Pë
PrPμPSPsC†C†PjP°P±C†, C†PeC- P†C†P†P·P†P†P†P»Pë PrPs C†PëC†C,PμPjPSPsC—
PIC-PrP†PμPIC-PrC- C- P±C†P»Pë PIPëC%PëPjPë PI 2,7B†”15 C†P°P·C-PI, PSC-Pμ
C†PμPePsPjPμPSP†PμPIP°PSP° PrPsP·P° PrP»CΠ P»C†P†PëPSPë, PSPμ PjP°P»Pë P†P†P»PëPIC†
PSP° C,,C-P·C-PsP»PsP†C-C† C†PμC†C†PμPIPμC†C†P†PëPSPSPsC— C†PëC†C,PμPjPë,
C†PμP†C†PμPrC†PeC,PëPIPSC† C,,C†PSPeC†C-C† C†P°PjC†C-PI P°P±Ps C†P°PjPsPe P°P±Ps PSP°
PIP†PSP†PePSPμPSPSCΠ C†P†PμC†PëC,,C-C†PSPsC— C,PsPeC†PëC†PSPsC†C,C- PrP»CΠ
PsC†P†P°PSC-PI-PjC-C†PμPSPμPμ.

P’ PrPsC†P»C-PrPμPμPSPSC- PSP° CΠPIP°PSC†C†PePëC... PjP°PeP°PeP°C..., C†PeC-
PsC,C†P†PjC†P†P°P»Pë PrPμPSPsC†C†PjP°P± P†C†PμC,C†P†PμPj P†PμC†C-PsPrC†,
PμPePIC-PIP°P»PμPSC,PSPsP†Pμ P†PμC†C†PμC†C,C†C† PIP°P†C-C,PSPsC†C,C-,
PrPsP·Pë PrPμPSPsC†C†PjP°P±C†, C†PeC- P†C†P†P·P†P†P†P»Pë PrPs C†PëC†C,PμPjPSPsC—
PIC-PrP†PμPIC-PrC- C- P±C†P»Pë PIPëC%PëPjPë PI 9 C†P°P·C-PI, PSC-Pμ
C†PμPePsPjPμPSP†PμPIP°PSP° PrPsP·P° PrP»CΠ P»C†P†PëPSPë, PSPμ C†P†C†PëC†PëPSCΠP»Pë
C,PsPeC†PëC†PSPsC— PrC-C— PSP° PjP°C,C-C† P°P±Ps P†P»C-Pr P†C†PμC,C†P†PμPj
P†PμC†C-PsPrC†, PμPePIC-PIP°P»PμPSC,PSPsP†Pμ P†PμC†C†PμC†C,C†C† PIP°P†C-C,PSPsC†C,C-,
C...PsC†P° P»C-PjC,,P°C,PëC†PSC- PIC†P·P»Pë P†P»PsPrP° PSPμ
PrPsC†P»C-PrPμC†P†P°P»PëC†C.

P’ C-PSC†PμPjC† PrPsC†P»C-PrPμPμPSPSC- PSP° CΠPIP°PSC†C†PePëC... PjP°PeP°PeP°C...,
C†PeC- PsC,C†P†PjC†P†P°P»Pë PrPμPSPsC†C†PjP°P± P†C†PμC,C†P†PμPj PIP°P†C-C,PSPsC†C,C-
P· C†PëC†C,PμPjPSP†Pμ P†P†P»PëP†PμPj, C† 12 C†P°P·C-PI PIPëC%PëPj, PSC-Pμ PrPsP·P° PrP»CΠ
P»C†P†PëPSPë, PIC-PrPjC-C†P°P»Pë P·P±C-P»C†C†PμPSPSCΠ
PjPμC†C,PIPSPSP°C†PμPrPμPμPSC C,P° P†PμC†C,PSP°C,P°P»C†PSPsC—
C†PjPμC†C,PSPsC†C,C-; P†P°C,PsP»PsP†C-C†PSP†Pμ C†C-C†C, PeC-C†C,PsPe, C†PeP†Pμ
P†C†P†P·P†P†P†P†P PrPs P·PjPμPSC†PμPSPSCΠ PjC-C†PSPsC†C,C- PeC-C†C,PsPe,
P·PSP†PμPμPSP†Pμ P†PμPjPsP†PμP· C,P° PSPμP†C†P°PIP†P»C†PSP†Pμ P†C†P†PeC†C†;
PIC-PrC†C†C,PSC-C†C,C† P†PμC†PëC,,PμC†PëC†PSPëC... P»C-PjC,,PsPIC†P·P»C-PI;
C†P†PμPIC-P»C†PSPμPSPSCΠ PSPμPsPSP°C,P°P»C†PSPsP†Pμ C†PμC†C,C†.
PμP°PeC†P†PjP°P»C†PSP° PrPsP·P°, C†PeP° PSPμ P†C†P†P·P†P†P†P»P° PrPs

PIPëPSPëPePSPµPSPSCİİ CÍPİPsCÍC,PµCĤPµP¶CÍPIP°PSPëC... PSPµP±P°P¶P°PSPëC...
PµC,,PµPeC,C-PI PSPµ P±CÍP»P° PICÍC,P°PSPsPIP»PµPSP°. PŞPµCĤPµP· 6 PjC-CÍCİC†C-PI
PİC-CÍP»Cİİ PSP°CĤPsPrP¶PµPSPSCİİ P·PjC-PSPë, PİPsPIbĤ™ CİİP·P°PSC- P· PeC-CÍC,PeP°PjPë,
PİPsPeP°P·P°P»Pë PİPsPIPµCĤPSPµPSPSCİİ PrPs PSPsCĤPjPë, PSPµ PIC-PrPjC-C†P°P»PsCÍCİİ
PIPİP»PëPICÍ PSP° PİCĤPsCĤC-P·CÍPIP°PSPSCİİ P·CÍP±C-PI. PhPrPSP°Pe PIPİP»PëPI PSP°
P»C-PjC,,P°C,PëC†PSC- PICÍP·P»Pë C,P° PİCĤPëPeCÍCÍ P·P°P»PëCëPëPICÍCİİ, P° CÍ
PsPrPSC-C”C— C,PIP°CĤPëPSPë CÍPİPsCÍC,PµCĤC-PİP°P»P°CÍCİİ PjC-PSC-PjP°P»CHPSP°
P°P±Ps CÍPµCĤPµPrPSCİİ PjC-PSPµCĤP°P»C-P·P°C†C-Cİİ C†PëCÍP»PµPSPSPëC... C,PeP°PSPëPS
(P·PIbĤ™ CİİP·PsPe P· P»C-PeCÍPIP°PSPSCİİPj PSPµ PsC†PµPIPëPrPSPëPµ). PkPµ P±CÍP»Ps
PrPsPeP°P·C-PI CëPePsPrPë PrP»Cİİ PjP°C,PµCĤC- PrPs PİPsP»PsPiC-PI; PSPµP±P°P¶P°PSC-
CĤPµP°PeC†C-C— CÍ PjP°C,PµCĤC- PSPµC†P°CÍC,Ps PIPëPSPëPeP°P»Pë PİC-Pr C†P°CÍ
PİPsP»PsPiC-PI. P PsP·PIPëC,PsPe PjPsP»PsC†PSPsC— P·P°P»PsP·Pë PjP°C,PµCĤC- P±CÍPI
PSPsCĤPjP°P»CHPSPëPj.

P’ PrPsPeP»C-PSC-C†PSPëC... PrPsCÍP»C-PrP¶PµPSPSCİİC... CİİPePsCÍC,C- PeC-CÍC,PsPe PSP°
PjP°PIPİP°C... PİCĤPë C,CĤPëPIP°P»PsPjCÍ P»C-PeCÍPIP°PSPSC- PrPµPSPsCÍCÍPjP°P±PsPj
CÍPİPsPIC-P»CHPSPµPSPSCİİ CĤPµPjPsPrPµP»CĤPIP°PSPSCİİ PİPsPIbĤ™ CİİP·CÍPIP°P»PsCÍCİİ
P· PİPsPeCĤP°C%PµPSPSCİİPj PjC-C†PSPsCÍC,C- PeC-CÍC,PsPe C,P° PSPsCĤPjP°P»CHPSPëPjPë
PiC-CÍC,PsP»PsPiC-C†PSPëPjPë PİP°CĤP°PjPµC,CĤP°PjPë PeC-CÍC,PsPe.

PJ CÍP°PjC†C-PI PjPëCëPµPM, CİİPeC- CëP»CİİC...PsPj PiPµPSPSPsC— PjPsPrPëC,,C-PeP°C†C-C—
PjP°P»Pë PµPeCÍPİCĤPµCÍC-CĤ huRANKL (C,PµC...PSPsP»PsPiC-Cİİ knock-in mice) C-
PİC-PrPrP°PIP°P»PëCÍCİİ C,CĤP°PSCÍPePsCĤC,PëPeP°P»CHPSPsPjCÍ PİPµCĤPµP»PsPjCÍ,
PrPµPSPsCÍCÍPjP°P± P·P°C,CĤPëPjCÍPIP°PI PsCĤPİP°PSC-P·P°C†C-CĤ C...CĤCİİC%PµPIPSC—
C,PeP°PSPëPSPë C,P° CĤPµPjPsPrPµP»CĤPIP°PSPSCİİ PeC-CÍC,PePsPIPSPİPs PjPsP·PsP»Cİİ CÍ
PİPsCĤC-PIPSCİİPSPSC- P· PePsPSC,CĤPsP»PµPj, P°P»Pµ P±C-PsC...C-PjC-C†PSP°
PjC-C†PSC-CÍC,CH PSPµ P·P°P·PSP°PIP°P»P° PSPµP±P°P¶P°PSPsPiPs PIPİP»PëPICÍ.

PJ PrPsPeP»C-PSC-C†PSPëC... PrPsCÍP»C-PrP¶PµPSPSCİİC... PjPëCëC- C-P·
P·P°P±P»PsPePsPIP°PSPëPj PiPµPSPsPj RANK P°P±Ps RANKL PSPµ PjP°P»Pë P»P°PeC,P°C†C-C—
CÍ P·PIbĤ™ CİİP·PeCÍ P· PİCĤPëPiPSC-C†PµPSPSCİİPj PrPsP·CĤC-PIP°PSPSCİİ
PjPsP»PsC†PSPëC... P·P°P»PsP· (P»PsP±CÍP»Ps-P°P»CHPIPµPsP»CİİCĤPSPëPµ CĤPsP·PIPëC,PsPe
P·P°P»PsP· PİC-Pr C†P°CÍ PIP°PiC-C,PSPsCÍC,C-) C,P° PrPµPjPsPSCÍC,CĤCÍPIP°P»Pë
PİPsCĤCÍCëPµPSPSCİİ CÍC,PIPsCĤPµPSPSCİİ P»C-PjC,,PsPICÍP·P»C-PI.
PkPsPIPSP°CĤPsPrP¶PµPSC- PjPëCëC- C-P· P·P°P±P»PsPePsPIP°PSPëPj PiPµPSPsPj
RANK/RANKL PrPµPjPsPSCÍC,CĤCÍPIP°P»Pë P·PjPµPSCëPµPSPSCİİ PjP°CÍPë C,C-P»P°,
PİPsCÍP»P°P±P»PµPSPSCİİ CĤPsCÍC,CÍ PeC-CÍC,PePsPIPSC— C,PeP°PSPëPSPë,
PİPsCĤCÍCëPµPSPSCİİ P·PsPS CĤPsCÍC,CÍ C,P° PIC-PrCÍCÍC,PSC-CÍC,CH
PİCĤPsCĤC-P·CÍPIP°PSPSCİİ P·CÍP±C-PI. PhCÍP»P°P±P»PµPSPSCİİ CĤPsCÍC,CÍ
PeC-CÍC,PePsPIPSC— C,PeP°PSPëPSPë, PİPsCĤCÍCëPµPSPSCİİ P·PsPS CĤPsCÍC,CÍ C,P°
PIC-PrCÍCÍC,PSC-CÍC,CH PİCĤPsCĤC-P·CÍPIP°PSPSCİİ P·CÍP±C-PI C,P°PePsP¶
PIC-PrPjC-C†P°P»PëCÍCİİ PI PrPsCÍP»C-PrP¶PµPSPSCİİC... PSP°
PSPsPIPSP°CĤPsPrP¶PµPSPëC... C%CÍCĤP°C..., CİİPePëPj PIPİPsPrPëP»Pë
C-PSPiC-P±C-C,PsCĤPë RANKL, C- C†C- P·PjC-PSPë P±CÍP»Pë C†P°CÍC,PePsPIP
PsP±PsCĤPsC,PSPëPjPë PİC-CÍP»Cİİ PIC-PrPjC-PSPë C-PSPiC-P±C-C,PsCĤCÍ RANKL. PJ
PİCĤPëPjP°C,C-PI PİC-PrP»C-C,PePsPIPSPİPs PIC-PeCÍ, CİİPeC- PsC,CĤPëPjCÍPIP°P»Pë
PrPµPSPsCÍCÍPjP°P± PI PrPsP·C-, PI 2,7 C,P° 15 CĤP°P·C-PI (PrPsP·P° 10 C,P° 50 PjPi/PePi)
PIPëC%C-PN, P·P° PeP»C-PSC-C†PSCÍ PrPsP·CÍ, P±CÍP»Pë PİP°C,PsP»PsPiC-C†PSPs
P·PjC-PSPµPSC- P·PsPSPë CĤPsCÍC,CÍ. PÿP°PePëPj C†PëPSPsPj, P»C-PeCÍPIP°PSPSCİİ
PrPµPSPsCÍCÍPjP°P±PsPj PjPsP¶Pµ PİPsCĤCÍCëCÍPIP°C,Pë CĤC-CÍC, PeC-CÍC,PePsPIPSC—
C,PeP°PSPëPSPë CÍ PrC-C,PµPN, P· PIC-PrPeCĤPëC,PëPjPë P·PsPSP°PjPë CĤPsCÍC,CÍ C,P°

PjPsP¶Pµ PīCḡPēPiPSC-C†CṛPIP°C,Pē PīCḡPsCḡC-P·CṛPIP°PSPSC¶ P·CṛP±C-PI.

РљР»С-РSC-С†РSC- С...Р°СḡР°РeC,РµСḡРēCṛC,РēРeРē.

РµРsРeР°Р·Р°РSPSC¶.

РµРsРiРµСḡРµРrР¶РµРSPSC¶ РeC-СṛC,РeРsРiРēC... РiРsРrC-Р№ (РiР°C,РsР»РsРiC-C†РSPēР№ РiРµСḡРµР»РsРj, РsРiCḡРsРjC-РSPµРSPSC¶ РeC-СṛC,РsРe, РeРsРjРiCḡРµСṛC-С¶ СṛРiРēРSPSPsРiРs РjРsР·РeCṛ Р°Р±Рs С...C-СḡCṛCḡРiC-C†РSPµ РiC,СḡCṛC†Р°РSPSC¶ РSP° РeC-СṛC,РeР°C...) Cṛ РrРsCḡРsСṛР»РēC... РiР°C†C-С"РSC,С-Рi С-Р· РiC-Р·РSCHРsCḡ СṛC,Р°РrC-С"Сḡ Р·Р»РsС¶РeC-СṛРSPēC... РiCṛC...Р»РēРs, С¶РeC- РiCḡР°Р¶Р°CḡC,Сḡ РeC-СṛC,РeРē (РrРēРi. РiC-РrCḡРsР·РrC-Р» В«Р°Р°CḡРjР°РeРsРrРēРSP°РjC-РeР°В»).

Р>C-РeCṛPIP°PSPSC¶ РrРsCḡРsСṛР»РēC... C,Р° РiC-РrР»C-С,РeC-Рi Р· РrРsР·CḡC-Р»РsCḡ РeC-СṛC,РeРsРiРsCḡ СṛРēCṛC,РµРjРsCḡ, С¶РeC- РjР°CḡC,Сḡ РiC-РiР°РSC,РsРeР»C-С,РēРSPSCṛ РiCṛC...Р»РēРSCṛ РeC-СṛC,РsРe, С%Рs РSPµ РjРsР¶Рµ Р±CṛC,Рē РiРēРrР°Р»РµРSP° Р°Р±Рs С¶РeC%Рs С...C-СḡCṛCḡРiC-C†РSP° СḡРµР·РµРeC†C-С¶, РSP°Р№C-РjРsРiC-СḡРSC-С¶Рµ, РiCḡРēР·РiРµРrРµ РrРs С,С¶Р¶РeРēC... РSP°СṛР»C-РrРeC-Рi.

РµСḡРsC,РēРiРsРeР°Р·Р°РSPSC¶.

РµC-РrРiРēC%РµРSP° C†CṛC,Р»РēРiC-СṛC,Сḡ РrРs РrC-СḡC†РsC— СḡРµC†РsРiРēРSPē Р°Р±Рs РrРs Р±CṛРrСḡ-С¶РeРsC— РrРsРiРsРjC-Р¶РSPsC— СḡРµC†РsРiРēРSPē, РiРeР°Р·Р°РSPēC... Cṛ СḡРsР·РrC-Р»C- В«РŸРeР»Р°РrВ».

РќРµР»C-РeРsРiР°РSP° РiC-РiРsРeР°Р»СḡC†C-С"РjC-С¶ С,С¶Р¶РeРsРiРs СṛC,СṛРiРµРSC¶ (РrРēРi. СḡРsР·РrC-Р» В«РḡCṛРsР±Р»РēРiРsСṛC,С- Р·Р°CṛC,РsСṛCṛPIP°PSPSC¶В»).

РjCḡР°Р¶РµРSPSC¶ РiC-СṛР»Cṛ СṛC,РsРjР°C,РsР»РsРiC-C†РSPēC... Р°Р±Рs С...C-СḡCṛCḡРiC-C†РSPēC... РiC,СḡCṛC†Р°РSCH Рi СḡРsC,РsРiC-Р№ РiРsCḡРsР¶РSPēРSC-, С%Рs РSPµ Р·Р°РiРsCḡC,СḡСṛCṛ.

Р'Р·Р°C"РjРsРrC-С¶ Р· C-РSCēРēРjРē Р»C-РeР°CḡCḡРeРēРjРē Р·Р°CṛРsР±Р°РjРē C,Р° C-РSCēC- РiРēРrРē РiР·Р°C"РjРsРrC-Р№.

Р"РsСṛР»C-РrР¶РµРSPSC¶ РiР·Р°C"РjРsРrC-С— РSPµ РiCḡРsРiРsРrРēР»РēCṛCṛ. Р' РeР»C-РSC-С†РSPēC... РrРsСṛР»C-РrР¶РµРSPSC¶C... РiCḡРµРiР°CḡР°C, Р†РeCṛРrР¶РµРiР°C Р·Р°CṛC,РsСṛРsРiCṛРiР°CṛC Рi РeРsРjР±C-РSP°C†C-С— Р·C- СṛC,Р°РSPrР°CḡC,РSPsCḡ РiCḡРsC,РēРiCṛC...Р»РēРSPSPsCḡ C,РµСḡР°C-С"Сḡ C,Р° Cṛ СḡР°C- РiРsРiРµСḡРµРrРSCHРsРiРs Р»C-РeCṛPIP°PSPSC¶ Р±C-С,,РsСṛC,,РsРSP°C,Р°РjРē. РќРµ Р±CṛР»Рs РeР»C-РSC-С†РSPs Р·РSP°C†CṛC%РēC... Р·РjC-Рs РjC-РSC-РjР°Р»СḡРSPsC— СṛРēCḡРsРiР°C,РeРsРiРsC— РeРsРSC†РµРSC,СḡР°C†C-С— C,Р° C,,Р°CḡРjР°РeРsРrРēРSP°РjC-РeРē РrРµРSPsСṛCṛРjР°Р±Cṛ (N-C,РµР»Р»РsРiРµРiC,РēРr СṛРµC†C- Р· РiРsРiCḡР°РiРeРsCḡ РSP° РeCḡРµР°C,РēРSC-Рs, uNTx/Cr) РiCḡРē РsРrРSPsC†Р°CṛРsРjCṛ Р·Р°CṛC,РsСṛCṛPIP°PSPSC- С...C-РjC-РsC,РµСḡР°C-С— C,Р°/Р°Р±Рs РiРsCḡРjРsРSP°Р»СḡРSPsC— C,РµСḡР°C-С— Р°Р±Рs РiCḡРē РiРsРiРµСḡРµРrРSCHРsРjCṛ РiРSCṛC,СḡC-С¶РSCHРsРiРµРSPSPsРjCṛ РiРiРµРrРµРSPSC- Р±C-С,,РsСṛC,,РsРSP°C,Сṛ.

PhCÍPsP±P»PëPIPsCÍC,C- P·P°CÍC,PsCÍCžPIP°PSPSCÍ.

P°PsPrP°PIP°PSPSCÍ PeP°P»CHC†C-CĤ C,P° PIC-C,P°PjC-PSCř D. P°PsPrP°PIP°PSPSCÍ
PeP°P»CHC†C-CĤ C,P° PIC-C,P°PjC-PSCř D PSPµPsP±C...C-PrPSPµ PrP»CÍ PICÍC-C...
PİP°C†C-C"PSC,C-PI, P·P° PİPëPSCÍC,PePsPj PİP°C†C-C"PSC,C-PI P·
PiC-PİPµCĤPeP°P»CHC†C-C"PjC-C"Ĥ (PrPëPI. CĤPsP·PrC-P» B«PŸPİPsCÍC-P±
P·P°CÍC,PsCÍCřPIP°PSPSCÍ C,P° PrPsP·PëB»).

P"C-PİPsPeP°P»CHC†C-C"PjC-CÍ. P†CÍPSCřCĤC†Cř PiC-PİPsPeP°P»CHC†C-C"PjC-CĤ
PSPµPsP±C...C-PrPSPs PePsCĤPëPiCřPIP°C,Pë PrPs PİPsC†P°C,PeCř P»C-PeCřPIP°PSPSCÍ
PİCĤPµPİP°CĤP°C,PsPj P†PeCÍPrP¶PµPIP°^{B®}. P"C-PİPsPeP°P»CHC†C-C"PjC-CÍ PjPsP¶Pµ
PIPëPSPëPePSCřC,Pë PI P±CřPrCH-CÍPePëPŃ C†P°CÍ PİCĤPsC,CÍPiPsPj P»C-PeCřPIP°PSPSCÍ
PİCĤPµPİP°CĤP°C,PsPj P†PeCÍPrP¶PµPIP°^{B®}. PĤPsPSC-C,PsCĤPëPSPi CĤC-PIPSC-PI
PeP°P»CHC†C-CĤ CÍP»C-Pr PİCĤPsPIPsPrPëC,Pë PİPµCĤPµPr PİPİPµPrPµPSPSCÍPj
PİPsC†P°C,PePsPIPsC— PrPsP·Pë PİCĤPµPİP°CĤP°C,Cř P†PeCÍPrP¶PµPIP°^{B®}, PİCĤPsC,CÍPiPsPj
PrPIPsC... C,PëP¶PSC-PI PİC-CÍP»CÍ PİPİPµPrPµPSPSCÍ PİPsC†P°C,PePsPIPsC— PrPsP·Pë,
CÍPeC‰Ps PİPëPSPëPeP°CĤC,CH CÍPëPjPiC,PsPjPë P· PİC-PrPsP·CĤPsCĤ PSP°
PiC-PİPsPeP°P»CHC†C-C"PjC-CĤ (PrPëPI. CĤPsP·PrC-P» B«PµPsP±C-C†PSC-
CĤPµP°PeC†C-C—B» PrP»CÍ PsP·PSP°PŃPsPjP»PµPSPSCÍ P· CÍPëPjPiC,PsPjP·PjPë).
PķPµPsP±C...C-PrPSPs CĤPsP·PiP»CÍPSCřC,Pë PrPsPrP°C,PePsPIPëPŃ PjPsPSC-C,PsCĤPëPSPi
CĤC-PIPSCÍ PeP°P»CHC†C-CĤ PİC-Pr C†P°CÍ P»C-PeCřPIP°PSPSCÍ Cř PİP°C†C-C"PSC,C-PI P·
C,,P°PeC,PsCĤP°PjPë CĤPëP·PëPeCř PİPsCÍPIPë PiC-PİPsPeP°P»CHC†C-C"PjC-C— P°P±Ps PI
C-PSC€PëC... PİPëPİP°PrPeP°C... P·P°P»PµP¶PSPs PIC-Pr PeP»C-PSC-C†PSPsPiPs CÍC,P°PSCř
PİP°C†C-C"PSC,P°.

PµP°C†C-C"PSC,Pë PİPsPIPëPSPSC- PİPsPIC-PrPsPjP»CÍC,Pë PİCĤPs CÍPëPjPiC,PsPjPë, CÍPeC-
PIPeP°P·CřCĤC,CH PSP° PiC-PİPsPeP°P»CHC†C-C"PjC-CĤ. PİPeC‰Ps
PiC-PİPsPeP°P»CHC†C-C"PjC-CÍ PİPëPSPëPeP°C" PİC-Pr C†P°CÍ P»C-PeCřPIP°PSPSCÍ
PİCĤPµPİP°CĤP°C,PsPj P†PeCÍPrP¶PµPIP°^{B®}, PjPsP¶Pµ PİPëPSPëPePSCřC,Pë PİPsC,CĤPµP±P° Cř
PrPsPrP°C,PePsPIPsPjCř P·P°CÍC,PsCÍCřPIP°PSPSC- PeP°P»CHC†C-C"PİPëC... PrPsP±P°PIPsPe
C,P° PrPsPrP°C,PePsPIPsPjCř PjPsPSC-C,PsCĤPëPSPiCř CĤC-PIPSC-PI PeP°P»CHC†C-CĤ.

P' PİPµCĤC-PsPr PİC-CÍP»CÍCĤPµC"CÍC,CĤP°C†C-PŃPSPsPiPs P·P°CÍC,PsCÍCřPIP°PSPSCÍ
PİPsPIC-PrPsPjP»CÍP»PsCÍCÍ PİCĤPs C,CÍP¶PeCř CÍPëPjPiC,PsPjP°C,PëC†PSCř
PiC-PİPsPeP°P»CHC†C-C"PjC-CĤ (PIPeP»CĤC†P°CĤC†Pë P»PµC,P°P»CHPSC- PİPëPİP°PrPePë)
(PrPëPI. CĤPsP·PrC-P» B«PµPsP±C-C†PSC- CĤPµP°PeC†C-C—B»), PİCĤPë C†CHPsPjCř
P±C-P»CHC€C-CÍC,CH PİPëPİP°PrPeC-PI PİPëPSPëPeP°P»Pë PİCĤPsC,CÍPiPsPj PİPµCĤC€PëC...
C,PëP¶PSC-PI PIC-Pr PİPsC†P°C,PeCř P»C-PeCřPIP°PSPSCÍ, P°P»Pµ PjPsPiP»Pë
PIPëPSPëPeP°C,Pë C- PİC-P·PSC-C€Pµ.

PķPëCĤPePsPIP° PSPµPrPsCÍC,P°C,PSC-CÍC,CH. PµP°C†C-C"PSC,Pë P· C,CÍP¶PePsCĤ
PSPëCĤPePsPIPsCĤ PSPµPrPsCÍC,P°C,PSC-CÍC,CĤ (PeP»C-CĤPµPSCÍ PeCĤPµP°C,PëPSC-PSCř
< 30 PjP»/C...PI) P°P±Ps PİP°C†C-C"PSC,Pë PSP° PrC-P°P»C-P·C- PSP°P»PµP¶P°C,CH PrPs
PiCĤCřPiPë CĤPëP·PëPeCř CĤPsP·PIPëC,PeCř PiC-PİPsPeP°P»CHC†C-C"PjC-C—. P PëP·PëPe
CĤPsP·PIPëC,PeCř PiC-PİPsPeP°P»CHC†C-C"PjC-C— C,P° CÍCřPiCřC,PSCHPsPiPs
PİC-PrPŃPsPjCř CĤC-PIPSCÍ PİP°CĤP°C,PëCĤPµPsC—PrPSPsPiPs PİPsCĤPjPsPSCř
P·P±C-P»CHC€CřC"C,CHCÍCÍ P·C- P·P±C-P»CHC€PµPSPSCÍPj CÍC,CřPİPµPSCÍ
PSPëCĤPePsPIPsC— PSPµPrPsCÍC,P°C,PSPsCÍC,C-. PµPsCÍC,C-PŃPSPëPŃ
PjPsPSC-C,PsCĤPëPSPi CĤC-PIPSC-PI PeP°P»CHC†C-CĤ PsCÍPsP±P»PëPIPs PIP°P¶P»PëPIPëPŃ
PrP»CÍ C†PëC... PİP°C†C-C"PSC,C-PI.

PhCfC,PuPsPSPuPeCfjPsP·C%oPuP»PuPiPë (PhPkP©). PJ PiP°C†C-C"PSC,C-PI, CjPeC-
PsC,CfjPëPjCrPiP°P»Pë PiCfjPuPiP°CfjP°C, P†PeCf†PrP¶PuPiP°^{B®}, C†P°CfC,Ps
PiPsPIC-PrPsPjP»CjP»PsCfCH PiCfjPs PiPëPSPëPePSPuPSPSCj PhPkP© (PrPëPI. CfjPsP·PrC-P»
B«PuPsP±C-C†PSC- CfjPuP°PeC†C-C-B»).

PuPsC†P°C,PsPe P»C-PeCfPiP°PSPSCj/ PSPsPiPëPNë PeCfCfjCf P»C-PeCfPiP°PSPSCj
PiPsPiPëPSPuPS P±CfC,Pë PIC-PrPeP»P°PrPuPSPëPNë Cr PiP°C†C-C"PSC,C-PI P·
PSPuP·P°PiPsC"PSPëPjPë PIC-PrPeCfjPëC,PëPjPë CrCfjP°P¶PuPSPSCjPjPë Pjв[™] CjPePëC...
C,PeP°PSPëPS Cr CfjPsC,PsPIC-PNë PiPsCfjPsP¶PSPëPSC-. P PuPePsPjPuPSPPrCfC"C,CHCfCj
CfC,PsPjP°C,PsP»PsPiC-C†PSPëPNë PsPiP»CjPr P· PIC-PrPiPsPIC-PrPSPëPj
PiCfjPsC,,C-P»P°PeC,PëC†PSPëPj CfC,PsPjP°C,PsP»PsPiC-C†PSPëPj P»C-PeCfPiP°PSPSCjPj C,P°
C-PSPPrPëPIC-PrCfP°P»CHPSP° PsC†C-PSPeP° Cf†PiC-PIPIC-PrPSPsCëPuPSPSCj
PePsCfjPëCfC,CH/CfjPëP·PëPe PiPuCfjPuPr PiPsC†P°C,PePsPj P·P°CfC,PsCfCfPiP°PSPSCj
PrPuPSPsCfCfPjP°P±Cf.

PuCfjPë PsC†C-PSC†C- CfjPëP·PëPeCf CfjPsP·PiPëC,PeCf PhPkP© Cr PiP°C†C-C"PSC,P°
Cf†P»C-Pr PjP°C,Pë PSP° CrPiP°P·C- C,P°PeC- C†PëPSPSPëPePë CfjPëP·PëPeCf:

B· PuC,,PuPeC,PëPIPSC-CfC,CH P»C-PeP°CfjCfCHPePsPiPs P·P°Cf†PsP±Cf, C%oPs
Cf†PiCfjPëC†PëPSCjC" PiP°P»CHPjCrPiP°PSPSCj PeC-CfC,PePsPiPsC— CfjPuP·PsCfjP±C†C-C—
(P±C-P»CHCë PiPëCf†PsPePëPNë CfjPëP·PëPe Cr CfjP°P·C- P·P°CfC,PsCfCfPiP°PSPSCj
Cf†PëP»CHPSPsPrC-CHC†PëC... P»C-PeP°CfjCfCHPePëC... P·P°Cf†PsP±C-PI), CëP»CjC...
PIPiPuPrPuPSPSCj (P±C-P»CHCë PiPëCf†PsPePëPNë CfjPëP·PëPe Cr CfjP°P·C-
PiP°CfjPuPSC,PuCfjP°P»CHPSPsPiPs PIPIPuPrPuPSPSCj) C,P° CfCfPjP°CfjPSP° PrPsP·P°
P»C-PeP°CfjCfCHPePëC... P·P°Cf†PsP±C-PI, CjPeC- P·P°CfC,PsCf†PsPICfPiP°P»Pë PrP»Cj
PiP°P»CHPjCrPiP°PSPSCj PeC-CfC,PePsPiPsC— CfjPuP·PsCfjP±C†C-C—;

B· CfjP°Pe, CfCfPiCfC,PSC- P·P°C...PiPsCfjCHPiP°PSPSCj (PSP°PiCfjPëPeP»P°Pr
P°PSPuPjC-Cj, PePsP°PiCfP»PsPiP°C,C-Cj, C-PSC,,PuPeC†C-Cj),
C,CHC,CHPSPsPiP°P»C-PSPSCj;

B· CfCfPiCfC,PSCj C,PuCfjP°PiC-Cj: PePsCfjC,PëPePsCfC,PuCfjPsC—PrPë,
C...C-PjC-PsC,PuCfjP°PiC-Cj, C-PSPiC-P±C-C,PsCfjPë P°PSPiC-PsPiPuPSPuP·Cr,
PiCfjPsPjPuPSPuPiP° C,PuCfjP°PiC-Cj PiPsP»PsPiPë C,P° CëPëC—;

B· PiPsPiP°PSP° PiC-PiC-C"PSP° CfjPsC,PsPiPsC— PiPsCfjPsP¶PSPëPSPë,
P·P°C...PiPsCfjCHPiP°PSPSCj PiP°CfjPsPrPsPSC,P°, P·CfP±PSC- PiCfjPsC,PuP·Pë, C%oPs
PiPsPiP°PSPs PiCfjPëP»CjPiP°CHC,CH, PSP°CjPiPSC-CfC,CH
CfC,PsPjP°C,PsP»PsPiC-C†PSPsPiPs P·P°C...PiPsCfjCHPiP°PSPSCj, C-PSPiP°P·C-PNëPSPu
CfC,PsPjP°C,PsP»PsPiC-C†PSPu PIC,CfjCrC†P°PSPSCj (PSP°PiCfjPëPeP»P°Pr
PiPëPrP°P»PuPSPSCj P·CfP±P°).

P'CfC- PiP°C†C-C"PSC,Pë PiPsPiPëPSPSC- PiC-PrC,CfjPëPjCrPiP°C,Pë PrPsCfC,P°C,PSCH
PiC-PiC-C"PSC† CfjPsC,PsPiPsC— PiPsCfjPsP¶PSPëPSPë, PiCfjPsC...PsPrPëC,Pë
PiPuCfjC-PsPrPëC†PSC- CfC,PsPjP°C,PsP»PsPiC-C†PSC- PsPiP»CjPrPë C- PSPuPiP°PNëPSPs
PiPsPIC-PrPsPjP»CjC,Pë PiCfjPs P±CfPrCH-CjPeC- Cf†PëPjPiC,PsPjPë P· P±PsPeCf
CfjPsC,PsPiPsC— PiPsCfjPsP¶PSPëPSPë, C,P°PeC- CjPe CfCfC...P»PëPIC-CfC,CH P·CfP±C-PI,
P±C-P»CH P°P±Ps PSP°P±CfCjPe, PiPëCfjP°P·PePë, C%oPs PSPu P·P°PiPsCHCHC,CHCfCj
P°P±Ps PiCfjPsCfjPëPiP°CHC,CHCfCj, PiC-Pr C†P°Cf P»C-PeCfPiP°PSPSCj
PrPuPSPsCfCfPjP°P±PsPj. PuC-Pr C†P°Cf P»C-PeCfPiP°PSPSCj C-PSPiP°P·PëPIPSC-
CfC,PsPjP°C,PsP»PsPiC-C†PSC- PiCfjPsC†PuPrCfCfjPë PiPsC,CfjC-P±PSPs PiCfjPsPiPsPrPëC,Pë
P»PëCëPu PiC-Cf†P»Cj CfjPuC,PuP»CHPSPsPiPs CfjPsP·PiP»CjPrCf, C,P°PePëC...

ΠῖCῖPcC†PμPrC†Cῖ C†P»C-Pr C†PSPēPeP°C,Pē P±PμP·PῖPcC†PμCῖPμPrPSCḤPs PῖPμCῖPμPr PῖPcC†P°C,PePsPj PIPμPrPμPSPSCῖ ΠῖCῖPμPῖP°CῖP°C,C† P†PeC†PrP¶PμPIP°^{B®}.

PμP»P°PS PIPμPrPμPSPSCῖ PsPeCῖPμPjPēC... PῖP°C†C-C"PSC,C-PI, C† CῖPePēC... CῖPcP·PIPēPSC†P»PēC†Cῖ PhPκP©, PῖPsPIPēPSPμPS P±C†C,Pē CῖPcP·CῖPcP±P»PμPSPēPNē PI C,C-C†PSC-PNē C†PῖC-PIPῖCῖP°C†C- P»C-PeC†CḤC†PēPj P»C-PeP°CῖPμPj C,P° C†C,PcPjP°C,PcP»PcPῖPcPj P°P±Ps C%PμP»PμPῖPSPs-P»PēC†CḤPsPIPēPj C...C-CῖC†CῖPῖPcPj, CῖPePēPNē PjP°C" PrPcC†PIC-Pr P»C-PeC†PIP°PSPSCῖ PhPκP©. PῖPēPjC†P°C†PsPIPμ PῖCῖPēPῖPēPSPμPSPSCῖ P»C-PeC†PIP°PSPSCῖ ΠῖCῖPμPῖP°CῖP°C,PcPj P†PeC†PrP¶PμPIP°^{B®} PSPμPsP±C...C-PrPSPs CῖPcP·PῖP»CῖPrP°C,Pē PrPs PjPsPjPμPSC,C† P·P°PIPμCῖCēPμPSPSCῖ C...PIPcCῖPcP±Pē C- C† CῖP°P·C- PjPsP¶P»PēPIPcC†C,C- P·PjPμPSCēC†PIP°C,Pē ΠῖCῖPcPῖPcPeC†CḤC†C- C,,P°PeC,PcCῖPē.

PhC†C,PμPsPSPμPeCῖPcP· P·PsPIPSC-CēPSCḤPsPῖPs C†P»C†C...PsPIPcPῖPs ΠῖCῖPcC...PsPrC†. Pj CῖP°P·C- P·P°C†C,PcC†C†PIP°PSPSCῖ PrPμPSPcC†C†PjP°P±C† PῖPsPIC-PrPsPjP»CῖP»PsC†Cῖ ΠῖCῖPc PsC†C,PμPsPSPμPeCῖPcP· P·PsPIPSC-CēPSCḤPsPῖPs C†P»C†C...PsPIPcPῖPs ΠῖCῖPcC...PsPrC†. PhPsP¶P»PēPIPēPjPē C†PēPSPSPēPeP°PjPē CῖPēP·PēPeC† C†CḤPsPῖPs P·P°PῖP°P»PμPSPSCῖ C" PIPēPePcCῖPēC†C,P°PSPSCῖ C†C,PμCῖPcC—PrC-PI C- C...C-PjC-PcC,PμCῖP°PῖC-Cῖ, P° C,P°PePsP¶ P»PsPeP°P»CḤPSC- C,,P°PeC,PcCῖPē CῖPēP·PēPeC†, C,P°PeC- CῖPe C-PSC,,PμPeC†C-C— C,P° C,CῖP°PIPjPē. P' C-CῖPcPῖC-PrPSC-C†C,CḤ PsC†C,PμPsPSPμPeCῖPcP·C† P·PsPIPSC-CēPSCḤPsPῖPs C†P»C†C...PsPIPcPῖPs ΠῖCῖPcC...PsPrC† C†P»C-Pr PICῖP°C...PsPIC†PIP°C,Pē C† PῖP°C†C-C"PSC,C-PI, CῖPeC- PsC,CῖPēPjC†CḤC,CḤ PrPμPSPcC†C†PjP°P± C,P° PjP°CḤC,CḤ C†PēPjPῖC,PcPjPē P· P±PsPeC† PsCῖPῖP°PSC-PI C†P»C†C...C†, C† C,,C†. C...CῖPcPSC-C†PSC- C-PSC,,PμPeC†C-C— PIC†C...P°.

PhC,PēPῖPsPIC- PῖPμCῖPμP»PsPjPē C†C,PμPῖPSP°. PμCῖPc P°C,PēPῖPsPIC- PῖPμCῖPμP»PsPjPē C†C,PμPῖPSP° PῖPsPIC-PrPsPjP»CῖP»PsC†Cῖ C† PῖP°C†C-C"PSC,C-PI, CῖPeC- PsC,CῖPēPjC†PIP°P»Pē PrPμPSPcC†C†PjP°P± (PrPēPI. CῖPcP·PrC-P» B«PμPsP±C-C†PSC- CῖPμP°PeC†C-C—B»). PhC,PēPῖPsPIC- PῖPμCῖPμP»PsPjPē C†C,PμPῖPSP° PjPsP¶C†C,CḤ PIPēPSPēPeP°C,Pē ΠῖCῖPē PSPμP·PSP°C†PSC-PNē C,CῖP°PIPjC- P°P±Ps P·P° C—C— PIC-PrC†C†C,PSPcC†C,C- PI C†C†P±C,CῖPcC...P°PSC,PμCῖPSC-PNē P°P±Ps PrC-P°C,,C-P·P°CῖPSC-PNē PrC-P»CῖPSC†C- C†C,PμPῖPSP°. PῖPῖPμC†PēC,,C-C†PSC- CῖPμP·C†P»CḤC,P°C,Pē CῖPμPSC,PῖPμPSPsP»PsPῖC-C†PSPsPῖPs PrPcC†P»C-PrP¶PμPSPSCῖ C...P°CῖP°PeC,PμCῖPēP·C†CḤC,CḤ C†C- CῖPIPēC%P°. PῖP°PePsP¶ ΠῖCῖPc P°C,PēPῖPsPIC- PῖPμCῖPμP»PsPjPē C†C,PμPῖPSP° PῖPsPIC-PrPsPjP»CῖP»PsC†Cῖ C† PῖP°C†C-C"PSC,C-PI P· PῖPμPIPSPēPjPē C†C†PῖC†C,PSC-PjPē C†C,P°PSP°PjPē (C,P°PePēPjPē CῖPe PrPμC,,C-C†PēC, PIC-C,P°PjC-PSC† D, CῖPμPIPjP°C,PcC—PrPSPēPNē P°CῖC,CῖPēC,, PῖC-PῖPsC,,PsC†C,,P°C,P°P·C-Cῖ) C,P° ΠῖCῖPē P·P°C†C,PcC†C†PIP°PSPSC- PῖPμPIPSPēC... C,,P°CῖPjP°C†PμPIC,PēC†PSPēC... P·P°C†PsP±C-PI (PSP°ΠῖCῖPēPeP»P°Pr P±C-C,,PsC†C,,PsPSP°C,C-PI, PῖP»CḤPePsPePsCῖC,PēPePsC—PrC-PI, C-PSPῖC-P±C-C,PcCῖC-PI ΠῖCῖPc,PcPSPSPc— PῖPsPjPῖPē). P|C- CῖPIPēC%P° C,P°PePsP¶ PIPēPSPēPeP°P»Pē P±PμP· P°PSC,PēCῖPμP·PsCῖP±C,PēPIPSPc— C,PμCῖP°PῖC-C—. PhPSP°P»PsPῖC-C†PSC- PῖPμCῖPμP»PsPjPē, ΠῖCῖPc CῖPeC- PῖPsPIC-PrPsPjP»CῖP»PsC†Cῖ C† P·PIbῥ™ CῖP·PeC† P· ΠῖCῖPēPNēPsPjPsPj P±C-C,,PsC†C,,PsPSP°C,C-PI, C†P°C†C,Pc C" P±C-P»P°C,PμCῖP°P»CḤPSPēPjPē; C,P°PePēPj C†PēPSPsPj, PSPμPsP±C...C-PrPSPs PsP±C†C,PμP¶C†PIP°C,Pē ΠῖCῖPc,PēP»PμP¶PSPμ C†C,PμPῖPSPs C† PῖP°C†C-C"PSC,C-PI, CῖPeC- PsC,CῖPēPjC†CḤC,CḤ PrPμPSPcC†C†PjP°P±, P· PῖC-PrC,PIPμCῖPrP¶PμPSPēPj PῖPμCῖPμP»PsPjPsPj C,C-P»P° C†C,PμPῖPSPsPῖPsC— PeC-C†C,PePē. PμPsC,CῖC-P±PSPs CῖPcP·PῖP»CῖPSC†C,Pē PIC-PrPjC-PSC† ΠῖCῖPμPῖP°CῖP°C,C† P†PeC†PrP¶PμPIP°^{B®} PrP»Cῖ PῖP°C†C-C"PSC,C-PI P· PῖC-PrPsP·CῖPcCḤ PSP° P°C,PēPῖPsPIPēPNē PῖPμCῖPμP»PsPj

СГГ,РμPиPSP° PиC-Pr C±P°CГ PsC†C-PSPePë CГC,P°PSCГ PиP°C†C-C"PSC,P° PSP° PsCГPSPsPIC-
C-PSPPrPëPIC-PrCГP°P»CHbPSPsPiPs CГPиC-PIPIC-PrPSPsC€PμPSPSCи
PePsCГPëCГC,CHb/CГPëP·PëPe. PμC-Pr C±P°CГ P»C-PeCГPIP°PSPSCи PrPμPSPsCГCГPjP°P±PsPj
PиP°C†C-C"PSC,P°Pj PSPμPsP±C...C-PrPSPs CГPμPePsPjPμPSPPrCГPIP°C,Pë
PиPsPIC-PrPsPjP»CиC,Pë PиCГPs PSPsPIPëP№ P°P±Ps PSPμP·PIPëC±PSPëP№ P±C-P»CHb PI
CГC,РμPиPSC-, PeCГP»CHbC€PsPiPsPjCГ CГCГPиP»PsP±C- P°P±Ps PиP°C...PsPIC-P№
PrC-P»CиPSC†C-. PμP°C†C-C"PSC,C-PI P· C,P°PePëPjPë CГPëPjPiC,PsPjP°PjPë CГP»C-Pr
PиPμCГPμPIC-CГCиC,Pë PSP° PSP°CиPIPIC-CГC,CHb PSPμPиPsPiPsPSPsPiPs PиPμCГPμP»PsPjCГ
CГC,РμPиPSP°.

P"C-PиPμCГPeP°P»CHbC†C-C"PjC-Cи PиC-CГP»Cи PиCГPëPиPëPSPμPSPSCи
P·P°CГC,PsCГCГPIP°PSPSCи PиCГPμPиP°CГP°C,CГ CГ PиP°C†C-C"PSC,C-PI C-P·
PиC-PиP°PSC,PsPeP»C-C,PëPSPSPëPjPë PиCГC...P»PëPSP°PjPë PeC-CГC,PsPe, P° C,P°PePsPи C-P·
PeC-CГC,PePsPiPsCГ CГPëCГC,РμPjPsCГ, C°Ps CГPsCГC,Рμ. PμCГPs PeP»C-PSC-C±PSPs
P·PSP°C±CГC°CГ PиC-PиPμCГPeP°P»CHbC†C-C"PjC-CГ, C°Ps PиPsC,CГPμP±CГPIP°P»P°
PиPsCГPиC-C,P°P»C-P·P°C†C-C— C,P° CГCГPeP»P°PrPSCГPIP°P»P°CГCи PиPsCГC,CГPëPj
CГCГP°PиPμPSPSCиPj PSPëCГPsPe, PиPsPIC-PrPsPjP»CиP»Pë PиCГPë
P·P°CГC,PsCГCГPIP°PSPSC- PиCГPμPиP°CГP°C,CГ P†PeCГPrPиPμPIP°^B CГ PиP°C†C-C"PSC,C-PI
C-P· PиC-PиP°PSC,PsPeP»C-C,PëPSPSPëPjPë PиCГC...P»PëPSP°PjPë PeC-CГC,PsPe C±PμCГPμP·
C,PëPиPSC- C±Pë PjC-CГCиC†C- PиC-CГP»Cи PиCГPëPиPëPSPμPSPSCи P»C-PeCГPIP°PSPSCи.

PμC-CГP»Cи PиCГPëPиPëPSPμPSPSCи P»C-PeCГPIP°PSPSCи PSPμPsP±C...C-PrPSPs
PePsPSC,CГPsP»CГPIP°C,Pë PиP°C†C-C"PSC,C-PI C°PsPrPs PIPëPSPëPePSPμPSPSCи
PsP·PSP°Pe C- CГPëPjPiC,PsPjC-PI PиC-PиPμCГPeP°P»CHbC†C-C"PjC-C— C-P·
PиPμCГC-PsPrPëC±PSPëPj PIPëP·PSP°C±PμPSPSCиPj CГC-PIPIC PëP°P»CHbC†C-CГ CГ
CГPëCГPsPIP°C,C†C- PeCГPsPIC- C,P° PиPsPIC,PsCГPSPsCГ PsC†C-PSPePsCГ
PSPμPsP±C...C-PrPSPsCГC,C- PrPsPrP°C,PePsPiPsPiPs P·P°CГC,PsCГCГPIP°PSPSCи
PиCГPμPиP°CГP°C,C-PI PeP°P»CHbC†C-CГ C,P° PIC-C,P°PjC-PSCГ D (PrPëPI. CГPsP·PrC-P»
B«PμPsP±C-C±PSC- CГPμP°PeC†C-C-B»).

PμCГPμPиP°CГP°C, P†PeCГPrPиPμPIP°^B PSPμ CГPμPePsPjPμPSPPrCГC,CHbCГCи
PиP°C†C-C"PSC,P°Pj C-P· PeC-CГC,PePsPiPsCГ CГPëCГC,РμPjPsCГ, C°Ps
CГPsP·PIPëPIP°C,C,CHbCГCи (PrPëPI. CГPsP·PrC-P» B«PиPиPsCГC-P±
P·P°CГC,PsCГCГPIP°PSPSCи C,P° PrPsP·PëB»). PиP°PePsPи PиPsPIC-PrPsPjP»CиP»PsCГCи
PиCГPs PeP»C-PSC-C±PSPs CГCГC,C,C"PIC PиC-PиPμCГPeP°P»CHbC†C-C"PjC-CГ CГ C†C-C" C—
PиCГCГPиPë PиP°C†C-C"PSC,C-PI, C°Ps PIPëPSPëPeP°P»P° C±PμCГPμP· PиCГPsPjC-PиPsPe
C±P°CГCГ PIC-Pr C,PëPиPSC-PI PrPs PjC-CГCиC†C-PI PиC-CГP»Cи PиCГPëPиPëPSPμPSPSCи
P·P°CГC,PsCГCГPIP°PSPSCи PиCГPμPиP°CГP°C,CГ.

P†PSC€C- PиP°C,PsP»PsPiC-C—. PμP°C†C-C"PSC,Pë, CиPeC- PsC,CГPëPjCГCГC,CHb
PиCГPμPиP°CГP°C, P†PeCГPrPиPμPIP°^B, PSPμ PиPsPiPsPSPSC- PsPrPSPsC±P°CГPSPs
P·P°CГC,PsCГPsPICГPIP°C,Pë C-PSC€C- P»C-PeP°CГCГCHbPeC- P·P°CГPsP±Pë, CиPeC-
PjC-CГC,CиC,CHb PrPμPSPsCГCГPjP°P± (CГ P·PiбГ™ CиP·PeCГ P· PsCГC,РμPsPiPsCГPsP·PsPj).

PμP°C†C-C"PSC,Pë, CиPeC- PsC,CГPëPjCГCГC,CHb PиCГPμPиP°CГP°C, P†PeCГPrPиPμPIP°^B,
PSPμ PиPsPiPsPSPSC- PsPrPSPsC±P°CГPSPs P·P°CГC,PsCГPsPICГPIP°C,Pë
P±C-C,,PsCГC,,PsPSP°C,Pë.

P—P»PsCиPeC-CГPSC-CГC,CHb PиC-PиP°PSC,PsPeP»C-C,PëPSPSPsC— PиCГC...P»PëPSPë P°P±Ps
PиCГPsPiCГPμCГCГPIP°PSPSCи PjPμC,P°CГC,P°P·CГPIP°PSPSCиPj PIPëPSPëPeP°C"
PSPμC±P°CГC,Ps C- C" PIC-PrPsPjPëPj CГPëP·PëPePsPj CГ PиP°C†C-C"PSC,C-PI P·
PиC-PиP°PSC,PsPeP»C-C,PëPSPSPsCГ PиCГC...P»PëPSPsCГ PeC-CГC,PsPe. PкPμPsP±C...C-PrPSPs

PePsPSC, C₇H₅PsP»C₇H₅PIP°C, Pë C₇C, P°PS P_iP°C†C-C°PSC, C-PI PSP° PSP°C₇PIPSC-C₇C, C₇H₅ C₇H₅P_uPSC, P_iP_uPSPsP»PsPiC-C†PSPëC... PsP·PSP°Pe P·P»PsC₇IPeC-C₇PSPsC₇C, C-, PSPsPIPëC... PrC-P»C₇IPSPsPe P_iC₇H₅PsC₇PIC-C, P»P_uPSPSC₇ P°P±Ps PsC₇C, P_uPsP»C-P·C₇. P°PsC₇C, C₇P_iPSC- PeP»C-PSC-C†PSC- PrP°PSC- PSP_u PIPeP°P·C₇C₇C, C₇H₅ PSP° P_iC-PrPIPëC%P_uPSPëPN₅ C₇H₅PëP·PëPe P·P»PsC₇IPeC-C₇PSPsC₇C, C- C₇ P_iP°C†C-C°PSC, C-PI P· PiC-PiP°PSC, PsPeP»C-C, PëPSPSPsC₇ PiC₇C... P»PëPSPsC₇ PeC-C₇C, PsPe, C₇IPeC- PsC, C₇H₅PëPjC₇C₇C, C₇H₅ PiC₇H₅P_iP°C₇P°C, P†PeC₇PrP_uPIP°^{B®}.

P—P°C₇C, P_uC₇H₅P_uP_uPIP°PSPSC₇ C%PsPrPs PrPsP_iPsPjC-P_uPIP°PSPëC... C₇H₅P_uC†PsPIPëPS. P_iP_uPN₅ P»C-PeP°C₇C₇C₇H₅PePëPN₅ P·P°C₇C-P± PjC-C₇C, PëC, C₇H₅ C₇P_uPSC€P_u 1 PjPjPsP»C₇H₅ C₇C-PrPeC-C₇PSPëPjPë C₇P_iP°PrPePsPIPëPjPë PiC₇H₅PsP±P»P_uPjP°PjPë, P_iPsPiB₇™ C₇IP·P°PSPëPjPë P· PSP_uP_iP_uC₇H₅P_uPSPsC₇PëPjC-C₇C, C₇H₅ C₇, C₇C₇CrPeC, PsP·Pë, PSP_u P_iPsPIPëPSPSC- P·P°C₇C, PsC₇PsPIC₇PIP°C, Pë C†P_uPN₅ P»C-PeP°C₇C₇C₇H₅PePëPN₅ P·P°C₇C-P±.

P_iP_uPN₅ P»C-PeP°C₇C₇C₇H₅PePëPN₅ P·P°C₇C-P± PjC-C₇C, PëC, C₇H₅ PjP_uPSC€P_u 1 PjPjPsP»C₇H₅ PSP°C, C₇C-C₇ (23 PjPi) PSP° 120 PjPi, C, PsP±C, Ps PiC₇H₅P°PeC, PëC†PSPs PIC-P»C₇H₅PSPëPN₅ PIC-Pr PSP°C, C₇C-C₇.

P—P°C₇C, PsC₇C†PIP°PSPSC₇ C₇ PiP_uC₇C-PsPr PIP°PiC-C, PSPsC₇C, C- P°P±Ps PiPsPrC†PIP°PSPSC₇ PiC₇C†PrPrC₇.

P°P°PiC-C, PSC-C₇C, C₇H₅. P°C-PrC₇C₇C, PSC- PrPsC₇C, P°C, PSC- PrP°PSC- C%PsPrPs P·P°C₇C, PsC₇C₇PIP°PSPSC₇ PrP_uPSPsC₇C₇PjP°P±C₇ PIP°PiC-C, PSPëPj P_uPIP°C-PSPeP°Pj. Pj PrPsC₇P»C-PrP_uPIP°PSPSC₇C... PSP° C, PIP°C₇H₅PëPSP°C... P±C₇P»Ps PiC₇H₅PsPrP_uPjPsPSC₇C, C₇H₅PsPIP°PSPs C₇H₅P_iC₇H₅PsPrC₇PeC, PëPIPSC₇ C, PsPeC₇PëC†PSC-C₇C, C₇H₅ (PrPëPI. PiC-PrC₇H₅Ps·PrC-P» B«P°P°PSC- PrPsPeP»C-PSC-C†PSPëC... PrPsC₇P»C-PrP_uPIP°PSC₇ P· P±P_uP·PiP_uPePëB»).

P_uC₇H₅P_iP°C₇P°C, P†PeC₇PrP_uPIP°^{B®} PSP_u C₇H₅P_uPePsPjP_uPSPPrC₇C°C, C₇H₅C₇C₇ PrP»C₇ P·P°C₇C, PsC₇PsPIC₇PIP°PSPSC₇ PIP°PiC-C, PSPëPj C, P° P_uPIP°C-PSPeP°Pj C₇H₅P_iC₇H₅PsPrC₇PeC, PëPIPSPsPiPs PIC-PeC₇, C₇IPeC- PSP_u PIPëPePsC₇H₅PëC₇C, PsPIC₇C₇C, C₇H₅ P·P°C₇PsP±Pë PePsPSC, C₇H₅P°C†P_uPiC†C-C—. P-C-PSPeP°Pj C₇P»C-Pr C₇H₅P_uPePsPjP_uPSPPrC₇PIP°C, Pë C₇PSPëPeP°C, Pë PIP°PiC-C, PSPsC₇C, C- PI PiC₇H₅PsC†P_uC₇C- P»C-PeC₇PIP°PSPSC₇ PiC₇H₅P_iP°C₇P°C, PsPj P†PeC₇PrP_uPIP°^{B®} C- C%PsPSP°PN₅PjP_uPSC€P_u PiC₇H₅PsC, C₇IPiPsPj 5 PjC-C₇C₇C†C-PI PiC-C₇P»C₇ C†C₇H₅PsPiPs. P°C₇PrC₇H₅-C₇IPeC- P_uC₇, P_uPeC, Pë PiC₇H₅P_iP°C₇P°C, C₇ P†PeC₇PrP_uPIP°^{B®}, PN₅PjPsPIC-C₇PSC-C€P_u, P±C₇PrC₇C, C₇H₅ C₇PëP»C₇H₅PSC-C€PëPjPë PiC-Pr C†P°C₇ PrC₇C₇PiPsPiPs C, P° C, C₇H₅P_uC, C₇H₅PsPiPs C, C₇H₅PëPjP_uC₇C, C₇C-PI PIP°PiC-C, PSPsC₇C, C-, PsC₇PeC-P»C₇H₅PePë PjPsPSPsPeP»PsPSP°P»C₇H₅PSC- P°PSC, PëC, C-P»P° PIC-P»C₇H₅PSC-C€P_u PiC₇H₅Ps...PsPrC₇C, C₇H₅ C†P_uC₇H₅P_uP· PiP»P°C†P_uPSC, C₇ PI P»C-PSC-PN₅PSPsPjC₇ PiPsC₇C₇PIPrPeC₇ P· C₇H₅Ps·PIPëC, PePsPj PIP°PiC-C, PSPsC₇C, C-, PiC₇H₅Pë C†C₇H₅PsPjC₇ PSP°PN₅P±C-P»C₇H₅C€P° PeC-P»C₇H₅PeC-C₇C, C₇H₅ PiC₇H₅Ps...PsPrPëC, C₇H₅ PiC-Pr C†P°C₇ C, C₇H₅P_uC, C₇H₅PsPiPs C, C₇H₅PëPjP_uC₇C, C₇C₇.

P°C₇C₇PrPSP_u PIPëPiPsPrPsPIC₇PIP°PSPSC₇. P_kP_uPIC-PrPsPjPs, C†Pë PIPëPIPsPrPëC, C₇H₅C₇C₇ PrP_uPSPsC₇C₇PjP°P± P· PiC₇C₇PrPSPëPj PjPsP»PsPePsPj P»C₇PrPëPSPë. P_kP_u PjPsP_uPIP_u P±C₇C, Pë PIPëPeP»C₇C†P_uPSPëPN₅ C₇H₅PëP·PëPe PrP»C₇ P_uPIP°PSP°C₇H₅PsPrP_uPIP°PSPëC.../PSP_uPjPsPIP»C₇C, P°P°PsC₇P»C-PrP_uPIP°PSPSC₇ PSP° PjPëC€P°C... P· PSPsPeP°C₇C, PSPëPj PiP_uPSPsPj PiPsPeP°P·P°P»Pë, C%Ps PIC-PrC₇C₇C, PSC-C₇C, C₇H₅ RANKL PiC-Pr C†P°C₇ PIP°PiC-C, PSPsC₇C, C- PjPsP_uPIP_u PIPiP»PëPIP°C, Pë PSP° PrPsP·C₇C-PIP°PSPSC₇ PjPsP»PsC†PSPëC... P·P°P»PsP·, PiC₇H₅PëP·PiPsPrC₇C†Pë PrPs PiPsC₇C₇C€P_uPSPSC₇ P»P°PeC, P°C†C-C— PiC-C₇P»C₇ P_iPsP»PsPiC-PI (PrPëPI. PiC-PrC₇H₅Ps·PrC-P» B«P°P°PSC- PrPsPeP»C-PSC-C†PSPëC...

PrPsCfP»C-PrP¶PµPSCH P· P±PµP·PiPµPePëB»). PkPµPsP±C...C-PrPSPs PiC¶PëPNëPSC¶C,Pë
C¶C-CëPµPSPSC¶ PiC¶Ps PIC-PrPjPsPICr PIC-Pr PiC¶CfPrPSPsPiPs
PIPëPiPsPrPsPICrPIP°PSPSC¶ P°P±Ps PIC-PrPjPsPICr PIC-Pr C,PµC¶P°PiC-C—
PiC¶PµPiP°C¶P°C,PsPj P†PeCfPrP¶PµPIP°^{B®}, PIC¶P°C...PsPICrC¶C†Pë PePsC¶PëCfC,CH
PiC¶CfPrPSPsPiPs PIPëPiPsPrPsPICrPIP°PSPSC¶ PrP»C¶
PSPsPiPsPSP°C¶PsPrP¶PµPSPsPiPs/PSPµPjPsPIP»C¶C,Pë C,P° PePsC¶PëCfC,CH
P»C-PeCfPIP°PSPSC¶ PiC¶PµPiP°C¶P°C,PsPj P†PeCfPrP¶PµPIP°^{B®} PrP»C¶ P¶C-PSPePë.

P PµPiC¶PsPrCfPeC,PëPIPSP° C,,CfPSPeC†C-C¶. P”P°PSC- C%oPsPrPs PIPiP»PëPICr
PrPµPSPsCfCfPjP°P±Cf PSP° C¶PµPiC¶PsPrCfPeC,PëPIPSCr C,,CfPSPeC†C-C¶ Cf
P»C¶PrPëPSPë PIC-PrCfCfC,PSC-. P”PsCfP»C-PrP¶PµPSPSC¶ PSP° C,PIP°C¶PëPSP°C... PSPµ
PiPsPeP°P·P°P»Pë PiC¶C¶PjPëC... P°P±Ps PSPµPiC¶C¶PjPëC... CëPeC-PrP»PëPIPëC...
PIPiP»PëPIC-PI PSP° C¶PµPiC¶PsPrCfPeC,PëPIPSCr C,,CfPSPeC†C-C¶ (PrPëPI.
PiC-PrC¶PsP·PrC-P» B«P”P°PSC- PrPsPeP»C-PSC-C†PSPëC... PrPsCfP»C-PrP¶PµPSCH P·
P±PµP·PiPµPePëB»).

*P—PrP°C,PSC-CfC,CH PIPiP»PëPIP°C,Pë PSP° CëPIPëPrPeC-CfC,CH C¶PµP°PeC†C-C— PiC¶Pë
PePµC¶CzPIP°PSPSC- P°PIC,PsC,C¶P°PSCfPiPsC¶C,PsPj P°P±Ps C-PSCëPëPjPë
PjPµC...P°PSC-P·PjP°PjPë.*

PµC¶PµPiP°C¶P°C, P†PeCfPrP¶PµPIP°^{B®} PSPµ PIPiP»PëPIP°C” P°P±Ps PjP°C”
PSPµP·PSP°C†PSPëPNë PIPiP»PëPI PSP° CëPIPëPrPeC-CfC,CH C¶PµP°PeC†C-C— PiC¶Pë
PePµC¶CfPIP°PSPSC- P°PIC,PsC,C¶P°PSCfPiPsC¶C,PsPj P°P±Ps C¶PsP±PsC,C- P· C-PSCëPëPjPë
PjPµC...P°PSC-P·PjP°PjPë.

PYPiPsCfC-P± P·P°CfC,PsCfCzPIP°PSPSC¶ C,P° PrPsP·Pë.

PµC¶PµPiP°C¶P°C, P†PeCfPrP¶PµPIP°^{B®} CfP»C-Pr P·P°CfC,PsCfPsPICrPIP°C,Pë PiC-Pr
PSP°PiP»C¶PrPsPj P»C-PeP°C¶C¶.

P”PsP·CzPIP°PSPSC¶.

PkPµPsP±C...C-PrPSPµ C%oPsPrPµPSPSPµ PrPsPrP°PIP°PSPSC¶ PrPs C¶P°C†C-PsPSCr
C...P°C¶C†CfPIP°PSPSC¶ C%oPsPSP°PNëPjPµPSCëPµ 500 PjPi PeP°P»CHC†C-C¶ C,P° 400 PµPh
PIC-C,P°PjC-PSCr D, P·P° PIPëPSC¶C,PePsPj PIPëPiP°PrPeC-PI
PiC-PiPµC¶PeP°P»CHC†C-C”PjC-C— (PrPëPI. C¶PsP·PrC-P» B«PhCfPsP±P»PëPIPsCfC,C-
P·P°CfC,PsCfCfPIP°PSPSC¶B»).

PµPsPiPµC¶PµPrP¶PµPSPSC¶ PeC-CfC,PePsPIPëC... PiPsPrC-PNë Cf PrPsC¶PsCfP»PëC... C-P·
PiC-P·PSCHPsCH CfC,P°PrC-C”CH P·P»PsC¶PeC-CfPSPëC... PiCfC...P»PëPS, C¶PeC-
PIC¶P°P¶P°CHC,CH PeC-CfC,PePë. P PµPePsPjPµPSPrPsPIP°PSP° PrPsP·P° PiC¶PµPiP°C¶P°C,Cf
P†PeCfPrP¶PµPIP°^{B®} CfC,P°PSPsPIPëC,CH 120 PjPi, C¶PeCf PIPiPsPrC¶C,CH Cf
PIPëPiP»C¶PrC- PiC-PrCëPeC-C¶PSPsC— C-PSB¶[™] C”PeC†C-C— PsPrPëPS C¶P°P· PePsP¶PSC-
4 C,PëP¶PSC- PI PrC-P»C¶PSPeCf CfC,PµPiPSP°, C†PµC¶PµPIPSPsC— CfC,C-PSPePë P°P±Ps
PiP»PµC†P°.

P”C-PiP°PSC,PsPeP»C-C,PëPSPSP° PiCfC...P»PëPSP° PeC-CfC,PsPe.

P PµPePsPjPµPSPrPsPIP°PSP° PrPsP·P° PiC¶PµPiP°C¶P°C,Cf P†PeCfPrP¶PµPIP°^{B®} 120 PjPi,

B· PꞱPꞱCḡPꞱPr PIPꞱPrPꞱPSPSCḲPj PīCḡPꞱPīP°CḡP°C,Cr P†PeCīPꞱPrPḡPꞱPIP°B®
CḡPsP·C†PēPS PSPꞱPsP±C...C-PrPSPs PIC-P·CrP°P»CHPSPs PīPꞱCḡPꞱPIC-CḡPēC,Pē.
P PsP·C†PēPS PjPsPḡPꞱ PjC-CīC,PēC,Pē PSPꞱP·PSP°C†PSCr PeC-P»CHPeC-CīC,CH
PīCḡPsP·PsCḡPēC... P°P±Ps P±C-P»PēC... P±C-P»PePsPIPsPīPsPrC-P±PSPēC... C†P°CīC,PsPe.
PꞱPꞱ PIPꞱPsPrPēC,Pē CḡPsP·C†PēPS, CḲPeC%Ps PIC-PS PīPsPjCrC,PSC-PI P°P±Ps P·PjC-PSPēPI
PePsP»C-Cḡ.

B· PkPμ CΓC,CḡCfC€CfPIP°C,Pë.

B· P©PsP± CřPSPëPePSCřC,Pë PrPëCfPePsPjC,,PsCḡC,Cř PI PjC-CfC†C-PIPIPμPrPμPSPSCḡ, C,,P»P°PePsPS CřP»C-Pr PSP°PiCḡC-C,Pë PrPs PeC-PjPSP°C,PSPsC—C,PμPjPiPμCḡP°C,CřCḡPë (PrPs 25 B°C) C- PIPIPsPrPëC,Pë PiCḡPμPiP°CḡP°C,PiPsPIC-P»CHbPSPs.

B· P'PIPsPrPëC,Pë PIPμCfCH PIPjC-CfC, C,,P»P°PePsPSP°.

B· P''P»Cḡ PIPIPμPrPμPSPSCḡ PrPμPSPsCfCřPjP°P±Cř CḡPμPePsPjPμPSPřCřC''C,CHbCfCḡ PiPsP»PeP° PeP°P»C-P±CḡCř 27.

B· PkPμ PIPIPsPrPëC,Pë PiPsP»PeCř Cř C,,P»P°PePsPS PiPsPIC,PsCḡPSPs.

P'CřPrCHb-CḡPePëPNë PSPμPIPëPePsCḡPëCfC,P°PSPëPNë P»C-PeP°CḡCfCHbPePëPNë P·P°CfC-P±P°P±Ps PIC-PrC...PsPrPë PSPμPsP±C...C-PrPSPs CřC,PëP»C-P·CřPIP°C,Pë PIC-PrPiPsPIC-PrPSPs PrPs PjC-CfC†PμPIPëC... PIPëPjPsPi.

P''C-C,Pë.

P'PμP·PiPμPeP° C,P° PμC,,PμPeC,PëPIPSC-CfC,CH P·P°CfC,PsCfCřPIP°PSPSCḡ PiCḡPμPiP°CḡP°C,Cř P†PeCfPrPḡPμPIP°B® PrC-C,CḡPj (PIC-PePsPj PrPs 18 CḡPsPeC-PI) PSPμ PsC†C-PSCḡPIP°P»PëCfCḡ, P·P° PIPëPSCḡC,PePsPj PiC-PrP»C-C,PeC-PI P· PrPsP·CḡC-P»PsCḡ PeC-CfC,PePsPIPsCḡ CřPëCfC,PμPjPsCḡ (PIC-PePsPj PIC-Pr 12 PrPs 17 CḡPsPeC-PI), CḡPeC-PjP°CḡC,CH PiC-PiP°PSC,PsPeP»C-C,PëPSPSCř PiCřC...P»PëPSCř PeC-CfC,PsPe.

PμCḡPμPiP°CḡP°C, P†PeCfPrPḡPμPIP°B® PSPμ CḡPμPePsPjPμPSPřCřC''C,CHbCfCḡ PrP»Cḡ P·P°CfC,PsCfCřPIP°PSPSCḡ PrC-C,CḡPj (PIC-PePsPj PrPs 18 CḡPsPeC-PI), PsPeCḡC-Pj PiC-PrP»C-C,PeC-PI P· PrPsP·CḡC-P»PsCḡ PeC-CfC,PePsPIPsCḡ CřPëCfC,PμPjPsCḡ (PIC-PePsPj PIC-Pr 12 PrPs 17 CḡPsPeC-PI), CḡPeC- PjP°CḡC,CH PiC-PiP°PSC,PsPeP»C-C,PëPSPSCř PiCřC...P»PëPSCř PeC-CfC,PsPe (PrPëPI. CḡPsP·PrC-P» B«PhCfPsP±P»PëPIPsCfC,C-P·P°CfC,PsCfCřPIP°PSPSCḡB»).

P>C-PeCřPIP°PSPSCḡ PiC-PrP»C-C,PeC-PI P· PrPsP·CḡC-P»PsCḡ PeC-CfC,PePsPIPsCḡ CřPëCfC,PμPjPsCḡ, CḡPeC- PjP°CḡC,CH PiC-PiP°PSC,PsPeP»C-C,PëPSPSCř PiCřC...P»PëPSCř PeC-CfC,PsPe, C°Ps PSPμ PjPsPḡPμ P±CřC,Pë PIPëPrP°P»PμPSP° P°P±Ps CḡPeC°Ps C...C-CḡCřCḡPiC-C†PSP° CḡPμP·PμPeC†C-Cḡ, PSP°PNëC-PjPsPIC-CḡPSC-CëPμ, PiCḡPëP·PIPμPrPμ PrPs C,CḡPḡPePëC... PSP°CfP»C-PrPeC-PI: PrPsP·P° P°PSP°P»PsPiC-C†PSP° PrPsP·C- PrP»Cḡ PrPsCḡPsCfP»PëC....

PμCḡPëPiPSC-C†PμPSPSCḡ P»C-PiP°PSPřCř RANK/RANK (RANKL) (P»C-PiP°PSPř CḡPμC†PμPiC,PsCḡP° Bḡ P°PeC,PëPIP°C,PsCḡP° PSCřPeP»PμP°CḡPSPsPiPs C,,P°PeC,PsCḡP° PeP°PiP° P') PI PrPsCfP»C-PrPḡPμPSPSCḡC... PSP° C,PIP°CḡPëPSP°C... PiPsC''PrPSCřPIP°P»PsCfCḡ P· PiCḡPëPiPSC-C†PμPSPSCḡPj CḡPsCfC,Cř PeC-CfC,PsPe C- PIC-PrCfCřC,PSC-CfC,Cḡ PiCḡPsCḡC-P·CřPIP°PSPSCḡ P·CřP±C-PI; C†C- P·PjC-PSPë P±CřP»Pë C†P°CfC,PePsPIPs PsP±PsCḡPsC,PSPëPjPë PiC-CfP»Cḡ PiCḡPëPiPëPSPμPSPSCḡ PiCḡPëPiPSC-C†PμPSPSCḡ RANKL (PrPëPI. PiC-PrCḡPsP·PrC-P» B«P''P°PSC-PrPsPeP»C-PSC-C†PSPëC... PrPsCfP»C-PrPḡPμPSCḡ P· P±PμP·PiPμPePëB»).

PμPμCḡPμPrPsP·CžPIP°PSPSCḡ.

P"PsCfPIC-Pr PiPμCfPμPrPsP·CfPIP°PSPSCf Π Π PeP»C-PSC-CfPSPëC...
 PrPsCfP»C-PrP¶PμPSPSCfC... PIC-PrCfCfC,PSC-PN. PμCfPμPiP°CfP°C, P†PeCfPrP¶PμPIP°B®
 PIPsPrPëPICfCf Π Π PeP»C-PSC-CfPSPëC... PrPsCfP»C-PrP¶PμPSPSCfC... Π Π PrPsP·P°C... PrPs
 180 PjPi PePsP¶PSC- 4 C,PëP¶PSC- C,P° 120 PjPi PePsP¶PSC- 3 C,PëP¶PSC-.

PμPsP±C-CfPSC- CfPμP°PeC†C-C—.

P PμP·CfPjPμ PiCfPsC,,C-P»Cf P±PμP·PiPμPePë

P—P°PiP°P»CHbPSPëPN. PiCfPsC,,C-P»CH P±PμP·PiPμPePë C" PsPrPSPsPjP°PSC-C,PSPëPj
 PiCfPë CfCfC-C... P·P°C,PIPμCfPrP¶PμPSPëC... PiPsPeP°P·P°PSPSCfC... PrP»Cf
 P»C-PeP°CfCfCHbPePsPiPs P·P°CfPsP±Cf P†PeCfPrP¶PμPIP°B®.

P"CfP¶Pμ C±P°CfC,Ps PiPsPIC-PrPsPjP»CfP»PsCfCf PiCfPs PiC-PiPsPeP°P»CHC†C-C"PjC-Cf,
 C%oPs PIPëPSPëPeP°P»P° PiC-CfP»Cf PIPμPrPμPSPSCf PiCfPμPiP°CfP°C,Cf
 P†PeCfPrP¶PμPIP°B®, PiPsP»PsPIPSPëPj C±PëPSPsPj PiCfPsC,CfPiPsPj PiPμCfCëPëC... PrPIPsC...
 C,PëP¶PSC-PI. P"C-PiPsPeP°P»CHC†C-C"PjC-Cf PjPsPiP»P° P±CfC,Pë C,CfP¶PePsCf C-
 CfPëPjPiC,PsPjP°C,PëC±PSPsCf (PrPëPI. PiC-PrCfPsP·PrC-P» B«PhPiPëCf PsPeCfPμPjPëC...
 PiPsP±C-CfPSPëC... CfPμP°PeC†C-PNëB»). PïPe PiCfP°PIPëP»Ps, P·PSPëP¶PμPSPSCf
 CfC-PIPS-C-PI PeP°P»CHC†C-Cf Cf CfPëCfPsPIP°C,C†C- PeCfPsPIC- PμC,,PμPeC,PëPIPSPs
 CfCfCfPIP°P»PsCfCf CëP»CfC...PsPj PrPsPrP°PIP°PSPSCf PiCfPμPiP°CfP°C,C-PI
 PeP°P»CHC†C-Cf C,P° PIC-C,P°PjC-PSCf D. PkP°PNëC±P°CfC,C-CëPsCf PiPsP±C-CfPSPsCf
 CfPμP°PeC†C-C"Cf PiCfPë P·P°CfC,PsCfCfPIP°PSPSC- PiCfPμPiP°CfP°C,Cf
 P†PeCfPrP¶PμPIP°B® P±CfPI CfPePμP»PμC,PSPs-PjBf™ CfP·PsPIPëPN P±C-P»CH. Pj
 PiP°C†C-C"PSC,C-PI, CfPeC- PsC,CfPëPjCfPIP°P»Pë PiCfPμPiP°CfP°C, P†PeCfPrP¶PμPIP°B®,
 C±P°CfC,Ps PiPsPIC-PrPsPjP»CfP»PsCfCf PiCfPs PIPëPiP°PrPePë PsCfC,PμPsPSPμPeCfPsP·Cf
 C%oPμP»PμPiPë (PrPëPI. CfPsP·PrC-P» B«PhCfPsP±P»PëPIPsCfC,C-
 P·P°CfC,PsCfCfPIP°PSPSCfB» C,P° PiC-PrCfPsP·PrC-P» B«PhPiPëCf PsPeCfPμPjPëC...
 PiPsP±C-CfPSPëC... CfPμP°PeC†C-PNëB»).

P—PIPμPrPμPSP° C,P°P±P»PëC†Cf PiPsP±C-CfPSPëC... CfPμP°PeC†C-PNë

PлP»P°CfPëC,,C-PeP°C†C-Cf C±P°CfC,PsC,Pë PiPsP±C-CfPSPëC... CfPμP°PeC†C-PNë, PiCfPs
 CfPeC- PiPsPIC-PrPsPjP»CfP»PsCfCf Cf C±PsC,PëCfCHbPsC... PeP»C-PSC-CfPSPëC...
 PrPsCfP»C-PrP¶PμPSPSCfC... C,,P°P·Pë P†P† C,P° PrPIPsC... PeP»C-PSC-CfPSPëC...
 PrPsCfP»C-PrP¶PμPSPSCfC... C,,P°P·Pë P†P†, P° C,P°PePsP¶ PiC-Pr C±P°Cf
 PiC-CfP»CfCfPμC"CfC,CfP°C†C-PNëPSPsPiPs P·P°CfC,PsCfCfPIP°PSPSCf (PrPëPI.
 C,P°P±P»PëC†Cf 3): PrCfP¶Pμ C±P°CfC,Ps (≥ 1/10), C±P°CfC,Ps (≥ 1/100 Bf" < 1/10),
 PSPμC±P°CfC,Ps (≥ 1/1000 Bf" < 1/100), CfC-PrPePs (≥ 1/10000 Bf" < 1/1000), PrCfP¶Pμ
 CfC-PrPePs (< 1/10000) C,P° C±P°CfC,PsC,P° PSPμPIC-PrPsPjP° (PSPμPjPsP¶P»PëPIPs
 PsC†C-PSPëC,Pë PSP° PsCfPSPsPIC- PSP°CfPIPSPëC... PrP°PSPëC...). P' PePsP¶PSC-PNë
 PiCfCfPiC- P·P° C±P°CfC,PsC,PsCf PIPëPSPëPePSPμPSPSCf C,P° PeP»P°CfPsPj
 CfPëCfC,PμPjPë PsCfPiP°PSC-PI PiPsP±C-CfPSC- CfPμP°PeC†C-C—
 PiCfPμPrCfC,P°PIP»PμPSC- Π Π PiPsCfCfPrPeCf P·PjPμPSCëPμPSPSCf C,CfP¶PePsCfC,C-.

***PŷP°P±P»PëC†Cf 3. PμPsP±C-CfPSC- CfPμP°PeC†C-C—, PiCfPs CfPeC-
 PiPsPIC-PrPsPjP»CfP»PsCfCf Cf PiP°C†C-C"PSC,C-PI P· PiC-P·PSC-PjPë
 CfC,P°PrC-CfPjPë P·P»PsCfPeC-CfPSPëC... PiCfC...P»PëPS, CfPeC-***

P»C-PeP°CĤCĬCHbPePëC... P·P°CĬPsP±C-PI.

PhPïPëCĬ PsPeCĤPμPjPëC... PïPsP±C-C±PSPëC... CĤPμP°PeC†C-PN₆

P“C-PïPsPeP°P»CHC†C-C”PjC-CĬ. P’PëC%P° C±P°CĬC,PsC,P° CĤPsP·PIPëC,PeCř
PiC-PïPsPeP°P»CHC†C-C”PjC-C— CĬPïPsCĬC,PμCĤC-PiP°P»P°CĬCĬ Cř PeP»C-PSC-C±PSPëC...
PrPsCĬP»C-PrP¶PμPSPSCĬC... PïPsPïPμCĤPμPrP¶PμPSPSCĬ PμPμ Cř PïP°C†C-C”PSC,C-PI,
CĬPeC- PsC,CĤPëPjCřPIP°P»Pë PrPμPSPsCĬCřPjP°P±, PïPsCĤC-PIPSCĬPSPs P·
PïP°C†C-C”PSC,P°PjPë, CĬPeC- PsC,CĤPëPjCřPIP°P»Pë P·PsP»PμPrCĤPsPSPsPICř
PePëCĬP»PsC,Cř.

PĤP°PN₆PIPëC%P° C±P°CĬC,PsC,P° CĤPsP·PIPëC,PeCř PiC-PïPsPeP°P»CHC†C-C”PjC-C—
CĬPïPsCĬC,PμCĤC-PiP°P»P°CĬCĬ Cř C...PsPrC- PrPsCĬP»C-PrP¶PμPSPSCĬ C,,P°P·Pë P†P†P† Cř
PïP°C†C-C”PSC,C-PI C-P· PjC-C”P»PsPjPSPsCĤ C...PIPSCĤPsP±PsCĤ. P’PëPïP°PrPePë
PiC-PïPsPeP°P»CHC†C-C”PjC-C— C,CĤP°PïP»CĬP»PëCĬCĬ Cř 16,9 % C...PIPSCĤPëC..., CĬPeC-
PsC,CĤPëPjCřPIP°P»Pë PïCĤPμPïP°CĤP°C, P†PeCĬPrP¶PμPIP°^{B®}, C,P° Cř
12,4 % PïP°C†C-C”PSC,C-PI, CĬPeC- PsC,CĤPëPjCřPIP°P»Pë P·PsP»PμPrCĤPsPSPsPICř
PePëCĬP»PsC,Cř. P—PSPëP¶PμPSPSCĬ CĤC-PIPSCĬ CĬPëCĤPsPIP°C,PePsPIPSPiPs
PeP°P»CHC†C-CĤ 3-PiPs CĬC,CřPïPμPSCĬ PIPëPSPëPeP°P»Ps Cř 1,4 % C,P° 0,6 %
PïP°C†C-C”PSC,C-PI, C%Ps P·P°CĬC,PsCĬPsPICřPIP°P»Pë PïCĤPμPïP°CĤP°C,
P†PeCĬPrP¶PμPIP°^{B®} C,P° P·PsP»PμPrCĤPsPSPsPICř PePëCĬP»PsC,Cř PIC-PrPïPsPIC-PrPSPs, P°
4-PiPs CĬC,CřPïPμPSCĬ BĤ“ Cř 0,4 % C,P° 0,1 % PIC-PrPïPsPIC-PrPSPs.

P’ C,CĤCHbPsC... PeP»C-PSC-C±PSPëC... PrPsCĬP»C-PrP¶PμPSPSCĬC... C,,P°P·Pë P†P†P† P·
P°PeC,PëPIPSPëPj PePsPSC,CĤPsP»PμPj P·P° CřC±P°CĬC,CĤ PïP°C†C-C”PSC,C-PI P·
PiC-P·PSC-PjPë CĬC,P°PrC-CĬPjPë P·P»PsCĬPeC-CĬPSPëC... PïCřC...P»PëPS P·
CřCĤP°P¶PμPSPSCĬPj PeC-CĬC,PsPe PïCĤPs PiC-PïPsPeP°P»CHC†C-C”PjC-CĤ
PïPsPIC-PrPsPjP»CĬP»PsCĬCĬ Cř 9,6 % PïP°C†C-C”PSC,C-PI, CĬPeC- PsC,CĤPëPjCřPIP°P»Pë
PïCĤPμPïP°CĤP°C, P†PeCĬPrP¶PμPIP°^{B®}, C,P° Cř 5,0 % PïP°C†C-C”PSC,C-PI, CĬPeC-
PsC,CĤPëPjCřPIP°P»Pë P·PsP»PμPrCĤPsPSPsPICř PePëCĬP»PsC,Cř.

P—PSPëP¶PμPSPSCĬ 3 CĬC,CřPïPμPSCĬ CĤC-PIPSC-PI CĬPëCĤPsPIP°C,PePsPIPSPiPs
PeP°P»CHC†C-CĤ PIPëPSPëPeP°P»Ps Cř 2,5 % PïP°C†C-C”PSC,C-PI, CĬPeC-
PsC,CĤPëPjCřPIP°P»Pë PïCĤPμPïP°CĤP°C, P†PeCĬPrP¶PμPIP°^{B®}, C,P° Cř 1,2 %
PïP°C†C-C”PSC,C-PI, CĬPeC- PsC,CĤPëPjCřPIP°P»Pë P·PsP»PμPrCĤPsPSPsPICř PePëCĬP»PsC,Cř.
P—PSPëP¶PμPSPSCĬ 4 CĬC,CřPïPμPSCĬ CĤC-PIPSC-PI CĬPëCĤPsPIP°C,PePsPIPSPiPs
PeP°P»CHC†C-CĤ PIPëPSPëPeP°P»Ps Cř 0,6 % PïP°C†C-C”PSC,C-PI, CĬPeC-
PsC,CĤPëPjCřPIP°P»Pë PïCĤPμPïP°CĤP°C, P†PeCĬPrP¶PμPIP°^{B®}, C,P° Cř 0,2 %
PïP°C†C-C”PSC,C-PI, CĬPeC- PsC,CĤPëPjCřPIP°P»Pë P·PsP»PμPrCĤPsPSPsPICř PePëCĬP»PsC,Cř
(PrPëPI. CĤPsP·PrC-P» B«PhCĬPsP±P»PëIPsCĬC,C- P·P°CĬC,PsCĬCřPIP°PSPSCĬB»).

Pj PrPIPsC... PeP»C-PSC-C±PSPëC... PrPsCĬP»C-PrP¶PμPSPSCĬC... C,,P°P·Pë P†P† P·
PsPrPSC-C”CĤ PiCĤCřPïPsCĤ CřC±P°CĬPSPëPeC-PI PïCĤPs PiC-PïPsPeP°P»CHC†C-C”PjC-CĤ
PïPsPIC-PrPsPjP»CĬP»PsCĬCĬ Cř 5,7 % PïP°C†C-C”PSC,C-PI C-P·
PiC-PiP°PSC,PsPeP»C-C,PëPSPSPsCĤ PïCřC...P»PëPSPsCĤ PeC-CĬC,PsPe. P-PsPrPSP° P·
PïPsP±C-C±PSPëC... CĤPμP°PeC†C-PN₆ PSPμ PIPiP°P¶P°P»P°CĬCĬ CĬPμCĤPN₆PsP·PSPsCĤ.

P’ PïPμCĤC-PsPr PïC-CĬP»CĬCĤPμC”CĬC,CĤP°C†C-PN₆PSPsPiPs P·P°CĬC,PsCĬCřPIP°PSPSCĬ
PïPsPIC-PrPsPjP»CĬP»PsCĬCĬ PïCĤPs C,CĬP¶PeCř CĬPëPjPiC,PsPjP°C,PëC±PSCř
PiC-PïPsPeP°P»CHC†C-C”PjC-CĤ (PIPëP»CĤC±P°CĤC±Pë P»PμC,P°P»CHbPSC- PIPëPïP°PrPePë),

P'C-P»CHC€ PIPëCÍPsPeP° C‡P°CÍC,PsC,P° PIPëPSPëPePSPµPSPSCÍ PħPǵP©
 CÍPİPsCÍC,PµCĤC-PIP°P»P°CÍCÍ CÍ C...PsPrC- PeP»C-PSC-C‡PSPëC... PrPsCÍP»C-PrP¶PµPSCĤ
 PİPsPİPµCĤPµPrP¶PµPSPSCÍ PħPµ CÍ PİP°C†C-C"PSC,C-PI, CÍPeC- PsC,CĤPëPjCÍPİP°P»Pë
 PrPµPSPsCÍCÍPjP°P±, PİPsCĤC-PIPSCÍPSPs C-P· P·PsP»PµPrCĤPSPsPİPsCĤ
 PePëCÍP»PsC,PsCĤ. PǵP°PNëPIPëC%P° C‡P°CÍC,PsC,P° PIPëPSPëPePSPµPSPSCÍ PħPǵP©
 P±CÍP»P° CÍ PrPsCÍP»C-PrP¶PµPSPSC- C,,P°P·Pë P†P†P† CÍ PİP°C†C-C"PSC,C-PI P·
 PjC-C"»PsPjPSPsCĤ C...PIPSCĤPSP±PsCĤ. PJ PİPsPrPIC-PNëPSPs CÍP»C-PİC-PNë C,,P°P·C-
 P»C-PeCÍPİP°PSPSCÍ C†CHPsPİPs PrPsCÍP»C-PrP¶PµPSPSCÍ PħPǵP© P±CÍPI
 PİC-PrC,PIPµCĤPrP¶PµPSPëPNë CÍ 5,9 % PİP°C†C-C"PSC,C-PI, CÍPeC- PsC,CĤPëPjCÍPİP°P»Pë
 PİCĤPµPİP°CĤP°C, P†PeCÍPrP¶PµPIP°^{B®} (PjPµPrC-P°PSP° P·P°CÍC,PsCÍCÍPİP°PSPSCÍ
 19,4 PjC-CÍCÍC†CÍ; PrC-P°PİP°P·PsPS: 1bĤ"52), C,P° CÍ 3,2 % PİP°C†C-C"PSC,C-PI, CÍPeC-
 PsC,CĤPëPjCÍPİP°P»Pë P·PsP»PµPrCĤPSPsPİCÍ PePëCÍP»PsC,CÍ. PǵP° PjPsPjPµPSC,
 P·P°PIPµCĤC€PµPSPSCÍ PİPsPrPIC-PNëPSPs CÍP»C-PİPsC— C,,P°P·Pë C,PµCĤP°PİC-C—
 PrPsCÍP»C-PrP¶PµPSPSCÍ CÍPePsCĤPëPİPsPİP°PSP° PrP»CÍ PİPsPeP°P·PSPëPeP°
 PİP°C†C-C"PSC,-CĤC-Pe C‡P°CÍC,PsC,P° PIPëPSPëPePSPµPSPSCÍ
 PİC-PrC,PIPµCĤPrP¶PµPSPëC... PIPëPİP°PrPeC-PI PħPǵP© CÍ PİCĤCÍPİC- PİCĤPµPİP°CĤP°C,CÍ
 P†PeCÍPrP¶PµPIP°^{B®} (PjPµPrC-P°PSP° P·P°CÍC,PsCÍCÍPİP°PSPSCÍ 19,4 PjC-CÍCÍC†CÍ;
 PrC-P°PİP°P·PsPS: 1bĤ"52) CÍC,P°PSPsPIPëP»P° 2,0 PSP° 100 PİP°C†C-C"PSC,Ps-CĤPSPeC-PI
 PİC-Pr C‡P°CÍ PİPµCĤC€PsPİPs CĤPSPeCÍ P»C-PeCÍPİP°PSPSCÍ, 5,0 bĤ" PrCĤCÍPİPsPİPs
 CĤPSPeCÍ C,P° 4,5 CÍ PSP°CÍC,CÍPİPSC- CĤPSPePë. PħPµPrC-P°PSP° C‡P°CÍCÍ PrPs
 PIPëPSPëPePSPµPSPSCÍ PħPǵP© CÍC,P°PSPsPIPëP»P° 18,7 PjC-CÍCÍC†CÍ
 (PrC-P°PİP°P·PsPS: 1bĤ"44).

P' PīPμCḡPIPēPSPSPēC... C,,P°P·P°C... P»C-PeCfPIP°PSPSCḡ C,CḡCHPsC... P°PeC,PēPIPSPs
 PePsPSC,CḡPsP»CHPsPIP°PSPēC... PeP»C-PSC-CḡPSPēC... PrPsCfP»C-PrPḡPμPSCḡ C,,P°P·Pē
 P†IP† P·P° CfCḡP°CfC,Cḡ PīP°C†C-C"PSC,C-PI P· PīC-P·PSCḡPsCḡ CfC,P°PrC-C"Cḡ
 P·P»PsCḡPeC-CfPSPēC... PīCfC...P»PēPS P· CḡCḡP°PḡPμPSPSCḡPj PeC-CfC,PSPe PhKp©
 P±CfPI PīC-PrC,PIPμCḡPrPḡPμPSPēPNē Cḡ 1,8 % C...PIPSCḡPēC..., CḡPeC-
 PsC,CḡPēPjCfPIP°P»Pē PīCḡPμPīP°CḡP°C, P†PeCfPrPḡPμPIP°^{B®} (CfPμCḡPμPrPSC-PNē PIPiP»PēPI
 12 PjC-CfCḡC†C-PI; PrC-P°PīP°P·PsPS: 0,1Bḡ"40,5), C,P° Cḡ 1,3 % C...PIPSCḡPēC..., CḡPeC-
 PsC,CḡPēPjCfPIP°P»Pē P·PsP»PμPrCḡPsPSPsPICḡ PePēCfP»PsC,Cḡ. PḡP»C-PSC-CḡPSC-
 C...P°CḡP°PeC,PμCḡPēCfC,PēPePē C†PēC... PIPēPīP°PrPeC-PI P±CfP»Pē
 P°PSP°P»PsPīC-CḡPSPēPjPē Cḡ PīCḡCḡPīP°C... P»C-PeCfPIP°PSPSCḡ. Pj P±C-P»CHCēPsCfC,C-
 PīP°C†C-C"PSC,C-PI P· PīC-PrC,PIPμCḡPrPḡPμPSPēPj PhKp© (81 % PI PsP±PsC...
 PīCḡCḡPīP°C... P»C-PeCfPIP°PSPSCḡ) PI P°PSP°PjPSPμP·C- P±CfP»Ps PIPēPrP°P»PμPSPSCḡ
 P·CḡP±C-PI, PīPsPīP°PSP° PīC-PīC-C"PSP° CḡPsC,PSPiPsC— PīPsCḡPsPḡPSPēPSPē C,P°/P°P±Ps
 PICfC,P°PSPsPIP»PμPSPSCḡ P·CḡP±PSPēC... PīCḡPsC,PμP·C-PI. P'C-P»CHCēC-CfC,Cḡ
 PīP°C†C-C"PSC,C-PI PsC,CḡPēPjCfPIP°P»Pē P°P±Ps PIPḡPμ PīCḡPsPNēCēP»Pē
 C...C-PjC-PsC,PμCḡP°PīC-Cḡ.

P"PsCfP»C-PrPḡPμPSPSCḡ P·P° CḡCḡP°CfC,Cḡ PīP°C†C-C"PSC,C-PI P· CḡP°PePsPj
 PjPsP»PsCḡPSPsC— P·P°P»PsP·Pē P°P±Ps PīCḡPsCfC,P°C,Pē PIPeP»CḡCḡP°P»Pē
 CḡPsP·CēPēCḡPμPSCḡ C,,P°P·Cḡ P»C-PeCfPIP°PSPSCḡ PīCḡPμPīP°CḡP°C,PSPj
 P†PeCfPrPḡPμPIP°^{B®} (CfPμCḡPμPrPSC-PNē P·P°PīP°P»CHPSPēPNē PIPiP»PēPI
 14,9 PjC-CfCḡC†Cḡ; PrC-P°PīP°P·PsPS: 0,1Bḡ"67,2). PhKp© P±CfPI
 PīC-PrC,PIPμCḡPrPḡPμPSPēPNē Cḡ 6,9 % PīP°C†C-C"PSC,C-PI P· CḡP°PePsPj PjPsP»PsCḡPSPsC—
 P·P°P»PsP·Pē P°P±Ps PīCḡPsCfC,P°C,Pē PīC-Pr CḡP°Cf CḡPsP·CēPēCḡPμPSPsC— C,,P°P·Pē
 P»C-PeCfPIP°PSPSCḡ.

PŸPePsCḡPēPiPsPIP°PSP° PrP»Cḡ PīPsPeP°P·PSPēPeP° PīP°C†C-C"PSC,-CḡC-Pe CḡP°CfC,PsC,P°
 PIPēPSPēPePSPμPSPSCḡ PīC-PrC,PIPμCḡPrPḡPμPSPēC... PIPēPīP°PrPeC-PI PhKp©
 CfC,P°PSPsPIPēP»P° 1,1 PSP° 100 PīP°C†C-C"PSC,Ps-CḡPsPeC-PI PīC-Pr CḡP°Cf PīPμCḡCēPsPiPs
 CḡPsPeCḡ P»C-PeCfPIP°PSPSCḡ, 3,7 Bḡ" PīC-Pr CḡP°Cf PrCḡCḡPiPsPiPs CḡPsPeCḡ C,P° 4,6 Bḡ"
 Cḡ PīPsPrP°P»CHCēC- CḡPsPePē. PḡPμPrC-P°PSP° CḡP°CfCḡ PrPs PIPēPSPēPePSPμPSPSCḡ
 PhKp© CfC,P°PSPsPIPēP»P° 20,6 PjC-CfCḡC†Cḡ (PrC-P°PīP°P·PsPS: 4Bḡ"53).

P"°PSC- PSPμCḡP°PSPPrPsPjC-P·PsPIP°PSPsPiPs CḡPμC,CḡPsCfPīPμPeC,PēPIPSPsPiPs
 PsP±CfPμCḡPIP°C†C-PNēPSPsPiPs PrPsCfP»C-PrPḡPμPSPSCḡ P·P° CḡCḡP°CfC,Cḡ
 2877 PīP°C†C-C"PSC,C-PI P·C- P·P»PsCḡPeC-CfPSPēPjPē PīCfC...P»PēPSP°PjPē, CḡPeC-
 PsC,CḡPēPjCfPIP°P»Pē P»C-PeCfPIP°PSPSCḡ PīCḡPμPīP°CḡP°C,PSPj P†PeCfPrPḡPμPIP°^{B®}
 P°P±Ps P·PsP»PμPrCḡPsPSPsPiPsCḡ PePēCfP»PsC,PSCḡ Cḡ PēPIPμC†C-C—, P"°PSC-C— C,P°
 PkPsCḡPIPμPīC—, PīPsPeP°P·P°P»Pē, C°Ps 5-CḡC-CḡPSP° CḡP°CfC,PsC,P°
 PIPēPSPēPePSPμPSPSCḡ PīC-PrC,PIPμCḡPrPḡPμPSPsPiPs PhKp© CfC,P°PSPsPIPēP»P° 5,7 %
 (95 % P"P†: 4,4, 7,3; PjPμPrC-P°PSP° CḡP°CfCḡ CfPīPsCfC,PμCḡPμPḡPμPSPSCḡ:
 20 PjC-CfCḡC†C-PI [PrC-P°PīP°P·PsPS 0,2Bḡ"60]) Cḡ PePsPiPsCḡC,C- PīP°C†C-C"PSC,C-PI,
 CḡPeC- PsC,CḡPēPjCfPIP°P»Pē P†PeCfPrPḡPμPIP°^{B®}, C- 1,4 % (95 % P"P†: 0,8, 2,3;
 PjPμPrC-P°PSP° CḡP°CfCḡ CfPīPsCfC,PμCḡPμPḡPμPSPSCḡ: 13 PjC-CfCḡC†C-PI
 [PrC-P°PīP°P·PsPS 0,1Bḡ"60]) PI PsPeCḡPμPjC-PNē PePsPiPsCḡC,C- P·P°CfC,PSCḡCḡPIP°PSPSCḡ
 P·PsP»PμPrCḡPsPSPsPiPsC— PePēCfP»PsC,Pē. PḡBḡ™ CḡC,PēCḡC-CḡPSP° CḡP°CfC,PsC,P°
 PIPēPSPēPePSPμPSPSCḡ PhKp© Cḡ PīP°C†C-C"PSC,C-PI, CḡPeC- PīPμCḡPμPNēCēP»Pē PSP°
 P»C-PeCfPIP°PSPSCḡ P†PeCfPrPḡPμPIP°^{B®} PīC-CfP»Cḡ PīCḡPēPNēPsPjCḡ
 P·PsP»PμPrCḡPsPSPsPiPsC— PePēCfP»PsC,Pē, PrPsCḡC-PIPSCḡPIP°P»P° 6,6 % (95 % P"P†: 4,2,
 10,0; PjPμPrC-P°PSP° CḡP°CfCḡ CfPīPsCfC,PμCḡPμPḡPμPSPSCḡ: 13 PjC-CfCḡC†C-PI
 [PrC-P°PīP°P·PsPS 0,2Bḡ"60]).

PJ PeP»C-PSC-C#PSPsPjCf PrPsCfP»C-PrP¶PµPSPSC- C,,P°P·Pë P†P†P† Cr PïP°C†C-C"PSC,C-PI P·PSPµPjPµC,P°CfC,P°C,PëC#PSPëPj C¶P°PePsPj PiPµC¶PµPrPjC-C...CrC¶PsPIPsC— P·P°P»PsP·Pë (PïP°C†C-C"PSC,Pë, PrP»C¶ C¶PePëC... PiC¶PµPïP°C¶P°C, P†PeCfPrP¶PµPIP°^{B®} PSPµ PiPsPeP°P·P°PSPëPñ PrP»C¶ P·P°CfC,PsCfCrPIP°PSPSC¶) P· C,C¶PëPIP°P»PsC¶ PµPeCfPiPsP·PëC†C-C"¶ PiC¶PsC,C¶PiPsPj PiPµC¶C-PsPrCr PrPs 7 C¶PsPeC-PI P»C-PeCfPIP°PSPSC¶ C¶PePsC¶PëPiPsPIP°PSP° PrP»C¶ PiPsPeP°P·PSPëPeP° PïP°C†C-C"PSC,-C¶C-Pe C#P°CfC,PsC,P° PiC-PrC,PIPµC¶PrP¶PµPSPsPiPs PkP© CfC,P°PSPsPIPëP»P° 1,1 PSP° 100 PïP°C†C-C"PSC,Ps-C¶PsPeC-PI PiC¶PsC,C¶PiPsPj PiPµC¶C¶PsPiPs C¶PsPeCr P»C-PeCfPIP°PSPSC¶, 3,0 бґ“ PiC¶PsC,C¶PiPsPj PrC¶CrPiPsPiPs C¶PsPeCr C,P° 7,1бґ“ Cr PSP°CfC,CrPiPSC- C¶PsPePë.

PJ PrPsPIPiPsCfC,C¶PsPePsPIPsPjCf PIC-PrPeC¶PëC,PsPjCf PeP»C-PSC-C#PSPsPjCf PrPsCfP»C-PrP¶PµPSPSC- C,,P°P·Pë II Cr PïP°C†C-C"PSC,C-PI C-P·PiC-PiP°PSC,PsPeP»C-C,PëPSPSPsC¶ PiCrC...P»PëPSPsC¶ PeC-CfC,PsPe (PrPsCfP»C-PrP¶PµPSPSC¶ 6, PrPëPI. PiC-PrC¶PsP·PrC-P» B«P°P°C¶PjP°PePsPrPëPSP°PjC-PeP°B») PkP© P±CrPI PiC-PrC,PIPµC¶PrP¶PµPSPëPñ Cr 6,8 % PïP°C†C-C"PSC,C-PI, P·PsPeC¶PµPjP° PI PsPrPSPsPiPs PiC-PrP»C-C,PeP° (PjPµPrC-P°PSP° PeC-P»CHPePsCfC,C- PrPsP·: 34; PrC-P°PïP°P·PsPS: 4бґ“116). PkP° PjPsPjPµPSC, P·P°PIPµC¶C¶PµPSPSC¶ PrPsCfP»C-PrP¶PµPSPSC¶ PjPµPrC-P°PSP° C,C¶PëPIP°P»PsCfC,C- CrC#P°CfC,C- PI PrPsCfP»C-PrP¶PµPSPSC-, P·PsPeC¶PµPjP° Cr C,,P°P·C- PiPsPrP°P»CHC¶PsPiPs CfPiPsCfC,PµC¶PµP¶PµPSPSC¶, CfC,P°PSPsPIPëP»P° 60,9 PjC-CfC¶C†C¶ (PrC-P°PïP°P·PsPS: 0бґ“112,6). P¶PePsC¶PëPiPsPIP°PSP° PrP»C¶ PïPsPeP°P·PSPëPeP° PïP°C†C-C"PSC,-C¶C-Pe P·P°PiP°P»CHPSP° C#P°CfC,PsC,P° PiC-PrC,PIPµC¶PrP¶PµPSPsPiPs PkP© CfC,P°PSPsPIPëP»P° 1,5 PSP° 100 PïP°C†C-C"PSC,Ps-C¶PsPeC-PI (0,2 PSP° 100 PïP°C†C-C"PSC,Ps-C¶PsPeC-PI PiC¶PsC,C¶PiPsPj PiPµC¶C¶PsPiPs C¶PsPeCr P»C-PeCfPIP°PSPSC¶, 1,5 бґ“ PiC¶PsC,C¶PiPsPj PrC¶CrPiPsPiPs C¶PsPeCr, 1,8 бґ“ C,C¶PµC,CHPsPiPs C¶PsPeCr, 2,1 бґ“ C#PµC,PIPµC¶C,PsPiPs C¶PsPeCr, 1,4 бґ“ PiC¶PsC,C¶PiPsPj Piбґ“ C¶C,PsPiPs C¶PsPeCr C,P° 2,2 бґ“ Cr PiPsPrP°P»CHC¶C- C¶PsPePë). PµPµPrC-P°PSP° C#P°CfC Cr PrPs PIPëPSPëPePSPµPSPSC¶ PkP© CfC,P°PSPsPIPëP»P° 41 PjC-CfC¶C†CH (PrC-P°PïP°P·PsPS: 11бґ“96).

P°PsCfP»C-PrP¶PµPSPSC¶ 7 P±CrP»Ps PiC¶PsPIPµPrPµPSPs PrP»C¶ PiC¶PsPrPsPIP¶PµPSPSC¶ CfPiPsCfC,PµC¶PµP¶PµPSPSC¶ PiC¶PsC,C¶PiPsPj PrPsPrP°C,PePsPIPëC... 5 P°P±Ps P±C-P»CHC¶Pµ C¶PsPeC-PI P·P° PïP°C†C-C"PSC,P°PjPë P· PiC-PiP°PSC,PsPeP»C-C,PëPSPSPsC¶ PiCrC...P»PëPSPsC¶ PeC-CfC,PsPe, C¶PeC- PsC,C¶PëPjCrPIP°P»Pë P»C-PeCfPIP°PSPSC¶ PI C¶P°PjPeP°C... PrPsCfP»C-PrP¶PµPSPSC¶ 6. PkP© P±CrP»Ps P·P°C¶PµC" CfC,C¶PsPIP°PSPs Cr 6 PïP°C†C-C"PSC,C-PI (11,8 %) P· 51 PïP°C†C-C"PSC,P°, C%Ps PsC,C¶PëPjCrPIP°P»Pë P»C-PeCfPIP°PSPSC¶, PI C¶PePsPjCf C¶PµC¶PµPrPSC¶ P·P°PiP°P»CHPSP° PeC-P»CHPeC-CfC,CH PrPµPSPsCfCrPjP°P±Cr CfC,P°PSPsPIPëP»P° 42 PrPsP·Pë. P¶C¶Pë P·C†PëC... PIPëPiP°PrPeC-PI PkP© P±CrP»Pë PjPµPrPëC#PSPs PiC-PrC,PIPµC¶PrP¶PµPSC-.

P PµP°PeC†C-C— PiC-PrPIPëC%PµPSPsC— C#CzC,P»PëPIPsCfC,C-, PiPsPiбґ“ C¶P·P°PSC- P·PiC¶PëPñPsPjPsPj PiC¶PµPïP°C¶P°C,Cz. P' CrPjPsPIP°C... PiC-CfP»C¶C¶PµC" CfC,C¶P°C†C-PñPSPsPiPs P·P°CfC,PsCfCrPIP°PSPSC¶ Cr PïP°C†C-C"PSC,C-PI, C¶PeC- PsC,C¶PëPjCrPIP°P»Pë PiC¶PµPïP°C¶P°C, P†PeCfPrP¶PµPIP°^{B®}, PiPsPIC-PrPsPjP»C¶P»PsCfC¶ PiC¶Ps PIPëPSPëPePSPµPSPSC¶ PiC-PrPIPëC%PµPSPsC— C#CrC,P»PëPIPsCfC,C-, PIPeP»CHC#P°CHC#Pë C¶C-PrPeC-CfPSC- PIPëPiP°PrPePë P°PSP°C,,C-P»P°PeC,PëC#PSPëC... C¶PµP°PeC†C-Pñ.

P¶C,PëPiPsPIC- PiPµC¶PµP»PsPjPë CfC,PµPiPSP°. P' PiC¶PsPiC¶P°PjC- PeP»C-PSC-C#PSPsPiPs PrPsCfP»C-PrP¶PµPSPSC¶ Cr PïP°C†C-C"PSC,C-PI, C¶PeC- PsC,C¶PëPjCrPIP°P»Pë

PkPμ P±CrP»Ps PIPëCIIPIP»PμPSPs P¶PsPrPSPsPiPs CIIPIPëC%oP°, PïPsPIbTj™ CIIP·P°PSPsPiPs P·
P»C-PeCrPIP°PSPSCIIPIj, PrP»CII PsPeCTjPμPjPëC... PIPëPrC-PI CTjP°PeCr C,P° CTjP°PeCr P·
CTjPsP·PïPsPrC-P»PsPj P·P° PiCTjCrPïP°PjPë.

$P \triangleright P\ddot{e}C\epsilon P^{\circ}C''P\ddot{i}PsPrC-P \pm PSC-$ $PIP\ddot{e}C\acute{I}P\ddot{e}P\ddot{i}P^{\circ}PSPSC\sqcup$, $PIP\ddot{e}PeP \gg P\ddot{e}PeP^{\circ}PSC-$
 $P \gg C-PeP^{\circ}C\bar{H}C\acute{I}CHPeP\ddot{e}Pj$ $P \cdot P^{\circ}C\acute{I}PsP \pm PsPj$. $P \triangleright P\ddot{e}C\epsilon P^{\circ}C''P\ddot{i}PsPrC-P \pm PSC-$ $PIP\ddot{e}C\acute{I}P\ddot{e}P\ddot{i}P^{\circ}PSPSC\sqcup$,
 $PIP\ddot{e}PeP \gg P\ddot{e}PeP^{\circ}PSC-$ $P \gg C-PeP^{\circ}C\bar{H}C\acute{I}CHPeP\ddot{e}Pj$ $P \cdot P^{\circ}C\acute{I}PsP \pm PsPj$ ($PSP^{\circ}P\ddot{i}C\bar{H}P\ddot{e}PeP \gg P^{\circ}Pr$
 $C\bar{H}P_{\mu}P^{\circ}PeC \dagger C-C-$, $P\ddot{i}PsPrC-P \pm PSC-$ $PrPs$ $P\ddot{i}P \gg P^{\circ}C\acute{I}PePsP\ddot{i}Ps$ $P \gg P\ddot{e}C\epsilon P^{\circ}C\sqcup$),
 $PIC-PrPjC-C \ddagger P^{\circ}P \gg P\ddot{e}C\acute{I}CH$ $C\acute{r}$ $P\ddot{i}P^{\circ}C \dagger C-C''PSC$, $C-PI$ $C\acute{r}$ $P\ddot{i}PsC\acute{I}C$, $PjP^{\circ}C\bar{H}PeP_{\mu}C$, $P\ddot{e}PSP\ddot{i}PsPIP\ddot{e}PN_{\Xi}$
 $P\ddot{i}PuC\bar{H}C-PsPr$.

P₄C₇P_μPiP°C₇P°C, P†PeC†PrP¶P_μPIP°B® PIPëPIC‡P°PIC†C‡ C† PIC-PrPeC₇PëC,PSPjCr
PrPsC†P»C-PrP¶P_μPSPSC- P-P° CrC‡P°C†C,C_H 28 PiC-PrP»C-C,PeC-PI P· PrPsP·C₇C-P»PsC_H
PeC-C†C,PePsPiPsC_H C†PëC†C,P_μPjPsC_H, C‡PeC- PjP°P»Pë PiC-PiP°PSC,PSPeP»C-C,PëPSPSC†
PiCrC...P»PëPSC† PeC-C†C,PSPe. KkP° PsC†PSPSPIC- C†PëC... PSP±PjP_μP¶P_μPSPëC...
PrP°PSPëC... PiC₇PsC,,C-P»CH PiPsP±C-C†PSPëC... C₇P_μP°PeC†C-PNë PIPëC‡PIPëPIC†C‡
P°PSP°P»PsPiC-C†PSPëPj C,P°PePsPjCr C† PrPsC_HPsC†P»PëC....

$$\text{P}^+\text{PSC}\epsilon\text{C}-\text{PsC}\Gamma\text{PsP}\pm\text{P}\gg\text{P}\ddot{\text{e}}\text{PIC}-\text{PiC}\overline{\text{H}}\text{Cr}\ddot{\text{P}}\ddot{\text{P}}\ddot{\text{e}}\text{P}\ddot{\text{P}}^{\circ}\text{C}\dagger\text{C}-\text{C}''\text{PSC},\text{C}-\text{PI}$$

P' PeP»C-PSC-C‡PSPsPjCř PrPsCřP»C-PrP¶PµPSPSC- Cř PiP°C†C-C" PSC,C-PI P±PµP·
PiC-P·PSCĤPsC— CřC,P°PrC-C— CřP°PeCř P· PSPëCřPePsPIPsCĤ
PSPµPrPsCřC,P°C,PSC-CřC,CĤ C,CĬP¶¶PePsPiPs CřC,CřPiPµPSCĬ (PeP»C-CřPµPSCř
PeCřPµP°C,PëPSC-PSCř < 30 PjP»/C...PI) P°P±Ps PiP°C†C-C" PSC,C-PI PSP° PrC-P°P»C-P·C-
CřPiPsCřC,PµCřC-PiP°PICřCĬ P±C-P»CĤC€ PIPëCřPsPePëPNë CřPëP·PëPe CřPsP·PIPëC,PeCř
PiC-PiPsPeP°P»CĤC†C-C" PjC-C— P·P° PIC-PrCřCřC,PSPsCřC,C- PiCřPëPNëPsPjCř
PeP°P»CĤC†C-C" PIPëC... PrPsP±P°PIPsPe. P PëP·PëPe CřPsP·PIPëC,PeCř
PiC-PiPsPeP°P»CĤC†C-C" PjC-C— PiC-Pr C‡P°Cř P»C-PeCřPIP°PSPSCĬ PiCřPµPiP°CřP°C,PsPj
P†PeCřPrP¶PµPIP°^{B®} P·CřPsCřC,P°C" P·C- P·P±C-P»CĤC€PµPSPSCĬPj CřC,CřPiPµPSCĬ
PSPëCřPePsPIPsC— PSPµPrPsCřC,P°C,PSPsCřC,C-. P' PeP»C-PSC-C‡PSPsPjCř
PrPsCřP»C-PrP¶PµPSPSC- P·P° CřC‡P°CřC,CĤ PiP°C†C-C" PSC,C-PI P±PµP· PiC-P·PSCĤPsC—
CřC,P°PrC-C— CřP°PeCř Cř 19 % PiP°C†C-C" PSC,C-PI P· PSPëCřPePsPIPsCĤ
PSPµPrPsCřC,P°C,PSC-CřC,CĤ C,CĬP¶¶PePsPiPs CřC,CřPiPµPSCĬ (PeP»C-CřPµPSCř
PeCřPµP°C,PëPSC-PSCř < 30 PjP»/C...PI) C,P° Cř 63 % PiP°C†C-C" PSC,C-PI, CĬPeC- P±CřP»Pë
PSP° PiPµPjPsPrC-P°P»C-P·C-, PIPëPSPëPeP°P»P° PiC-PiPsPeP°P»CĤC†C-C" PjC-CĬ,
PSPµP·PIP°P¶P°CĤC‡Pë PSP° PiCřPëPNëPsPj PeP°P»CĤC†C-C" PIPëC... PrPsP±P°PIPsPe.
P—P°PiP°P»CĤPSP° C‡P°CřC,PsC,P° PIPëPSPëPePSPµPSPSCĬ PeP»C-PSC-C‡PSPs
CřCřC,C,C" PIPsC— PiC-PiPsPeP°P»CĤC†C-C" PjC-C— CřC,P°PSPsPIPëP»P° 9 %.

$$\text{P}\ddot{\text{Y}}\text{C}\dot{\text{r}}\text{P}\ddot{\text{i}}\text{C}\dot{\text{r}}\text{C}, \text{PSC}-\text{P}\ddot{\text{i}}\text{C}-\text{PrPN}\ddot{\text{e}}\text{PsP}\ddot{\text{i}}\text{P}\ddot{\text{e}}\text{C}\dot{\text{H}}\text{C}-\text{PIPSC}-\text{PI}\text{P}\ddot{\text{i}}\text{P}^{\circ}\text{C}\dot{\text{H}}\text{P}^{\circ}\text{C}, \text{P}\ddot{\text{e}}\text{C}\dot{\text{H}}\text{PuPsC}-\text{PrPSPsPiPs}$$

PiPsC₇PjPsPSCr C, P°PePsP¶ CÍPíPsCÍC, P_μC₇C-PiP°P»PëCÍCÍ CÍ PíP°C†C-C''PSC, C-PI, CÍPeC-PsC, C₇PëPjCíPíP°P»Pë PíC₇P_μPíP°C₇P°C, P†PeCÍPrP¶P_μPIP°^{B®} C- PjP°P»Pë PSPëC₇PePsPICr PSP_μPrPsCÍC, P°C, PSC-CÍC, CH C, CÍP¶PePsPiPs CÍC, CÍPíP_μPSCÍ P°P±Ps P±CíP»Pë PSP° PrC-P°P»C-P·C-. P_μPsPSC-C, PsC₇PëPSPi C₇C-PIPS-C-PI PeP°P»CHC†C-CH C, P° PrPsCÍC, P°C, PSC'' PSP°PrC...PsPrP¶P_μPSPSCÍ PeP°P»CHC†C-CH C, P° PIC-C, P°PjC-PSCr D PsCÍPsP±P»PëPIPs PSP_μPsP±C...C-PrPSC- PrP»CÍ PíP°C†C-C''PSC, C-PI P· PSPëC₇PePsPIPsC₇ PSP_μPrPsCÍC, P°C, PSC-CÍC, CH (PrPëPI. C₇PsP·PrC-P» B«P_hCÍPsP±P»PëPIPsCÍC, C-P·P°CÍC, PsCÍCíPíP°PSPSCÍB»).

P_μPsPIC-PrPsPjP»P_μPSPSCÍ PíC₇Ps PíC-PrPsP·C₇CHPIP°PSC- PíPsP±C-C†PSC- C₇P_μP°PeC†C-C—

P'P°P¶P»PëPIPs PíPsPIC-PrPsPjP»CÍC, Pë PíC₇Ps PíC-PrPsP·C₇CHPIP°PSC- PíPsP±C-C†PSC- C₇P_μP°PeC†C-C—, PíPëCÍPIP»P_μPSC- PíC-CÍP»CÍ C₇P_μC''CÍC, C₇P°C†C-C— P»C-PeP°C₇CÍCHPePsPiPs P·P°CÍPsP±Cí. PíP_μ PrP°C'' P·PjPsPiCí PíC₇PsPrPsPIP¶CíPíP°C, Pë CÍPíPsCÍC, P_μC₇C-PiP°C, Pë P·P° CÍPíC-PIPIC-PrPSPsCεP_μPSPSCÍPj PePsC₇PëCÍC, CH/C₇PëP·PëPe P·P°CÍC, PsCÍCíPíP°PSPSCÍ P»C-PeP°C₇CÍCHPePsPiPs P·P°CÍPsP±Cí. P_hP_μPsP±C...C-PrPSPs PíPsPIC-PrPsPjP»CÍC, Pë PíC₇Ps P±CíPrCH-CÍPeC-PíC-PrPsP·C₇CHPIP°PSC- PíPsP±C-C†PSC- C₇P_μP°PeC†C-C— C†P_μC₇P_μP·PSP°C†C-PsPSP°P»CHPSCr CÍPëCÍC, P_μPjCí.

P₇P_μC₇PjC-PS PíC₇PëPrP°C, PSPsCÍC, C-.

3 C₇PsPePë.

PjPjPsPIPë P·P±P_μC₇C-PiP°PSPSCÍ.

P—P±P_μC₇C-PiP°C, Pë PI C...PsP»PsPrPëP»CHPSPëPeCí PíC₇Pë C, P_μPjPíP_μC₇P°C, CíC₇C-2B₇''8 B°P₇ PI PsC₇PëPiC-PSP°P»CHPSC-PN₂ CíPíP°PePsPIC†C- PrP»CÍ P·P°C...PëCÍC, Cí PIC-Pr CÍPIC-C, P»P°. P_hP_μ P·P°PjPsC₇PsP¶CíPíP°C, Pë. P_hP_μ CÍC, C₇CíCεCíPíP°C, Pë. P—P±P_μC₇C-PiP°C, Pë PI PSP_μPrPsCÍC, CíPíPSPsPjCí PrP»CÍ PrC-C, P_μPN₂ PjC-CÍC†C-. P_μC-CÍP»CÍ PíPëP»CíC†P_μPSPSCÍ P· C...PsP»PsPrPëP»CHPSPëPeP° P»C-PeP°C₇CÍCHPePëPN₂ P·P°CÍC-P± P†PeCÍPrP¶P_μPIP°^{B®} PjPsP¶PSP° P·P±P_μC₇C-PiP°C, Pë PíC₇Pë PeC-PjPSP°C, PSC-PN₂ C, P_μPjPíP_μC₇P°C, CíC₇C- (PrPs 25 B°P₇) PI PsC₇PëPiC-PSP°P»CHPSC-PN₂ CíPíP°PePsPIC†C-PSP_μ P±C-P»CHCεP_μ 30 PrPSC-PI C, P° CÍP»C-Pr PíPëPePsC₇PëCÍC, P°C, Pë PíC₇PsC, CÍPiPsPj C†PëC... 30 PrPSC-PI.

P_hP_μCÍC¿PjC-CÍPSC-CÍC, CH.

P_hCÍPeC-P»CHPePë PrPsCÍP»C-PrP¶P_μPSPSCÍ C%PsPrPs CÍCíPjC-CÍPSPsCÍC, C- P·C-PSCεPëPjPë P·P°CÍPsP±P°PjPë PSP_μ PíC₇PsPIPsPrPëP»PëCÍCÍ, C†P_μPN₂ P»C-PeP°C₇CÍCHPePëPN₂ P·P°CÍC-P± PSP_μ PjPsP¶PSP° P·P°CÍC, PsCÍPsPICíPíP°C, Pë C₇P°P·PsPj P·C-PSCεPëPjPë P»C-PeP°C₇CÍCHPePëPjPë P·P°CÍPsP±P°PjPë.

PjPíP°PePsPIPeP°.

$$\text{P}_{\text{H}}\text{C}-\text{PSP}_{\text{M}}\text{C}_{\text{H}}\text{PICrP}_{\text{j}} 7061, 4817 \text{ ZK}, \text{P}'\text{C}_{\text{H}}\text{P}_{\text{M}}\text{PrP}^{\circ}, \text{P}_{\text{K}}\text{C}-\text{PrP}_{\text{M}}\text{C}_{\text{H}}\text{P} \gg \text{P}^{\circ}\text{PSPrP}_{\text{E}}.$$