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<110> REGENERON PHARMACEUTICALS, INC.

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<151> 2016-02-29

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Leu Leu Ile Lys Val Ile Leu Asp Lys Tyr Tyr Phe Leu Cys Gly Gln

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Cys Pro Leu Gly Glu Asp Glu Glu His Cys Val Lys Ser Phe Pro Glu
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Gly Pro Ala Val Ala Val Arg Leu Ser Lys Asp Arg Ser Thr Leu Gln
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Val Leu Asp Ser Ala Thr Gly Asn Trp Phe Ser Ala Cys Phe Asp Asn
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Ser Lys Pro Thr Phe Arg Ala Val Glu Ile Gly Pro Asp Gln Asp Leu
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Asp Val Val Glu Ile Thr Glu Asn Ser Gln Glu Leu Arg Met Arg Asn
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Ser Ser Gly Pro Cys Leu Ser Gly Ser Leu Val Ser Leu His Cys Leu
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210 215 220

Gln His Val Cys Gly Gly Ser Ile Leu Asp Pro His Trp Val Leu Thr
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Ala Ala His Cys Phe Arg Lys His Thr Asp Val Phe Asn Trp Lys Val
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Arg Ala Gly Ser Asp Lys Leu Gly Ser Phe Pro Ser Leu Ala Val Ala
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Lys Ile Ile Ile Ile Glu Phe Asn Pro Met Tyr Pro Lys Asp Asn Asp
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Ile Ala Leu Met Lys Leu Gln Phe Pro Leu Thr Phe Ser Gly Thr Val
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Arg Pro Ile Cys Leu Pro Phe Phe Asp Glu Glu Leu Thr Pro Ala Thr
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Pro Leu Trp Ile Ile Gly Trp Gly Phe Thr Lys Gln Asn Gly Gly Lys
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Met Ser Asp Ile Leu Leu Gln Ala Ser Val Gln Val Ile Asp Ser Thr
340 345 350

Arg Cys Asn Ala Asp Asp Ala Tyr Gln Gly Glu Val Thr Glu Lys Met
355 360 365

Met Cys Ala Gly Ile Pro Glu Gly Gly Val Asp Thr Cys Gln Gly Asp
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Ser Gly Gly Pro Leu Met Tyr Gln Ser Asp Gln Trp His Val Val Gly
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Ile Val Ser Trp Gly Tyr Gly Cys Gly Gly Pro Ser Thr Pro Gly Val
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Phe Tyr His Ser Ser Phe Gln Ile Leu Asn Val Glu Tyr Thr Glu Ala
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Leu Asn Ser Pro Ala Thr His Glu Tyr Arg Thr Leu Ser Glu Arg Ile
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Glu Ala Met Ile Thr Asp Glu Phe Arg Gly Ser Ser Leu Lys Ser Glu
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Phe Ile Arg Thr His Val Val Lys Leu Arg Lys Glu Gly Thr Gly Val
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Ser Gly Asn Leu Glu Ile Ala Pro Ser Asn Glu Ile Thr Ser Leu Thr
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Asp Gln Asp Thr Glu Asn Val Leu Thr Gln Glu Cys Gly Ala Arg Pro
 165 170 175

Asp Leu Ile Thr Leu Ser Glu Glu Arg Ile Ile Gly Gly Met Gln Ala
 180 185 190

Glu Pro Gly Asp Trp Pro Trp Gln Val Ser Leu Gln Leu Asn Asn Val
 195 200 205

His His Cys Gly Gly Ala Leu Ile Ser Asn Met Trp Val Leu Thr Ala
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Ala His Cys Phe Lys Ser Tyr Pro Asn Pro Gln Tyr Trp Thr Ala Thr
 225 230 235 240

Phe Gly Val Ser Thr Met Ser Pro Arg Leu Arg Val Arg Val Arg Ala
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Ile Leu Ala His Asp Gly Tyr Ser Ser Val Thr Arg Asp Asn Asp Ile
 260 265 270

Ala Val Val Gln Leu Asp Arg Ser Val Ala Phe Ser Arg Asn Ile His
 275 280 285

Arg Val Cys Leu Pro Ala Ala Thr Gln Asn Ile Ile Pro Gly Ser Val
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Ala Tyr Val Thr Gly Trp Gly Ser Leu Thr Tyr Gly Gly Asn Ala Val
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Thr Asn Leu Arg Gln Gly Glu Val Arg Ile Ile Ser Ser Glu Glu Cys
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Asn Thr Pro Ala Gly Tyr Ser Gly Ser Val Leu Pro Gly Met Leu Cys
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Ala Gly Met Arg Ser Gly Ala Val Asp Ala Cys Gln Gly Asp Ser Gly
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Gly Pro Leu Val Gln Glu Asp Ser Arg Arg Leu Trp Phe Val Val Gly
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 Ala Ser Met Lys Ser Arg Ile Glu Ser Val Leu Arg Gln Met Leu Asn

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Thr Asp Gln Ala Ala Ala Asn Trp Leu Ile Asn Glu Cys Gly Ala Gly
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Pro Asp Leu Ile Thr Leu Ser Glu Gln Arg Ile Leu Gly Gly Thr Glu
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Ala Glu Glu Gly Ser Trp Pro Trp Gln Val Ser Leu Arg Leu Asn Asn
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Ala His His Cys Gly Gly Ser Leu Ile Asn Asn Met Trp Ile Leu Thr
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Ala Ala His Cys Phe Arg Ser Asn Ser Asn Pro Arg Asp Trp Ile Ala
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Thr Ser Gly Ile Ser Thr Thr Phe Pro Lys Leu Arg Met Arg Val Arg
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Asn Ile Leu Ile His Asn Asn Tyr Lys Ser Ala Thr His Glu Asn Asp
 260 265 270

Ile Ala Leu Val Arg Leu Glu Asn Ser Val Thr Phe Thr Lys Asp Ile
 275 280 285

His Ser Val Cys Leu Pro Ala Ala Thr Gln Asn Ile Pro Pro Gly Ser
 290 295 300

Thr Ala Tyr Val Thr Gly Trp Gly Ala Gln Glu Tyr Ala Gly His Thr
 305 310 315 320

Val Pro Glu Leu Arg Gln Gly Gln Val Arg Ile Ile Ser Asn Asp Val
 325 330 335

Cys Asn Ala Pro His Ser Tyr Asn Gly Ala Ile Leu Ser Gly Met Leu
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35 40 45

Phe Tyr Arg Ser Ser Phe Gln Leu Leu Asn Val Glu Tyr Asn Ser Gln
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Leu Asn Ser Pro Ala Thr Gln Glu Tyr Arg Thr Leu Ser Gly Arg Ile
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Glu Ser Leu Ile Thr Lys Thr Phe Lys Glu Ser Asn Leu Arg Asn Gln
85 90 95

Phe Ile Arg Ala His Val Ala Lys Leu Arg Gln Asp Gly Ser Gly Val
100 105 110

Arg Ala Asp Val Val Met Lys Phe Gln Phe Thr Arg Asn Asn Asn Gly
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Ala Ser Met Lys Ser Arg Ile Glu Ser Val Leu Arg Gln Met Leu Asn
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Asn Ser Gly Asn Leu Glu Ile Asn Pro Ser Thr Glu Ile Thr Ser Leu
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Thr Asp Gln Ala Ala Ala Asn Trp Leu Ile Asn Glu Cys Gly Ala Gly
165 170 175

Pro Asp Leu Ile Thr Leu Ser Glu Gln Arg Ile Leu Gly Gly Thr Glu
180 185 190

Ala Glu Glu Gly Ser Trp Pro Trp Gln Val Ser Leu Arg Leu Asn Asn
195 200 205

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Thr Ser Gly Ile Ser Thr Thr Phe Pro Lys Leu Arg Met Arg Val Arg
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Asn Ile Leu Ile His Asn Asn Tyr Lys Ser Ala Thr His Glu Asn Asp
260 265 270

Ile Ala Leu Val Arg Leu Glu Asn Ser Val Thr Phe Thr Lys Asp Ile
275 280 285

His Ser Val Cys Leu Pro Ala Ala Thr Gln Asn Ile Pro Pro Gly Ser
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Thr Ala Tyr Val Thr Gly Trp Gly Ala Gln Glu Tyr Ala Gly His Thr
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Val Pro Glu Leu Arg Gln Gly Gln Val Arg Ile Ile Ser Asn Asp Val
325 330 335

Cys Asn Ala Pro His Ser Tyr Asn Gly Ala Ile Leu Ser Gly Met Leu
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Cys Ala Gly Val Pro Gln Gly Gly Val Asp Ala Cys Gln Gly Asp Ser
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