ECE 2023
25th European Congress of Endocrinology
13 – 16 May 2023, Istanbul Turkey

European Society of Endocrinology

AZP-3813, a Bicyclic, 16-Amino Acid Peptide Antagonist of the Human Growth Hormone Receptor, Effectively Suppresses IGF1 in Beagle Dogs

Guillaume Ravel[1], Clémentine Chalmey[1], Corentin Berardet[1], David Duracher[1], Haruaki Kurasaki[2], Tatsuya Tomiyama[2], Patrick Reid[2], Michael D. Culler[1]

[1]Amolyt Pharma, Ecully, France and Cambridge, Massachusetts, U.S.A, [2]PeptiDream, Inc., Kawasaki-Shi, Kanagawa, Japan

AMOLYT PHARMA

PeptiDream

European Society of Endocrinology

CONFLICT OF INTEREST

Michael D. Culler

X I have the following potential conflicts of interest to report:

☐ Research Contracts

☐ Consulting

X Employment in the Industry **(Employee of Amolyt Pharma)**

X Stockholder of a healthcare company

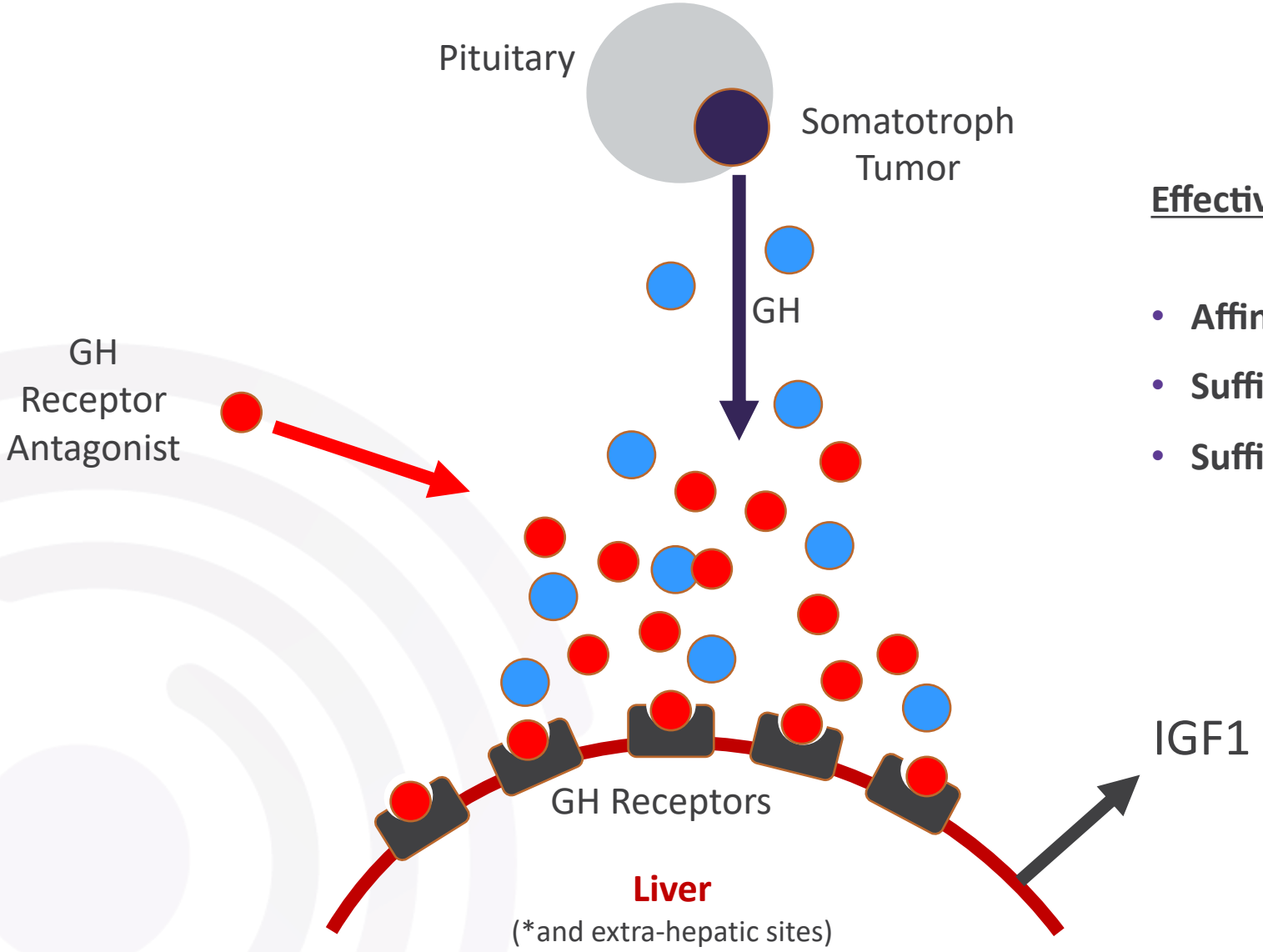
☐ Owner of a healthcare company

☐ Other(s) *– please include details*

No commercial logos or product names to be included please.

☐ **I declare that I have no potential conflict of interest.**

GH Receptor Antagonist to Suppress Excess IGF1 in Acromegaly



Effectiveness Depends On:

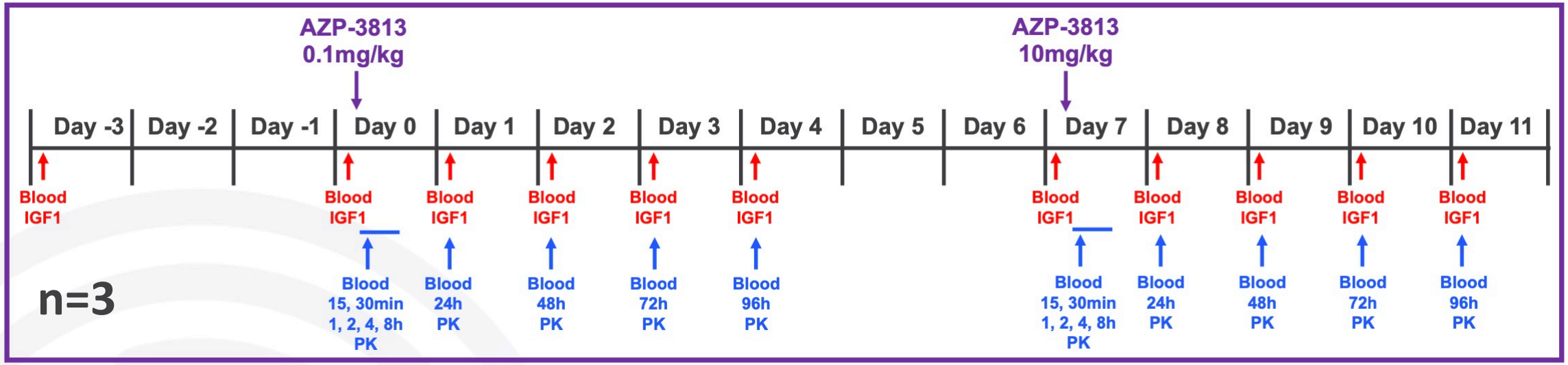
- **Affinity for GH receptor**
- **Sufficient concentration**
- **Sufficient half-life**

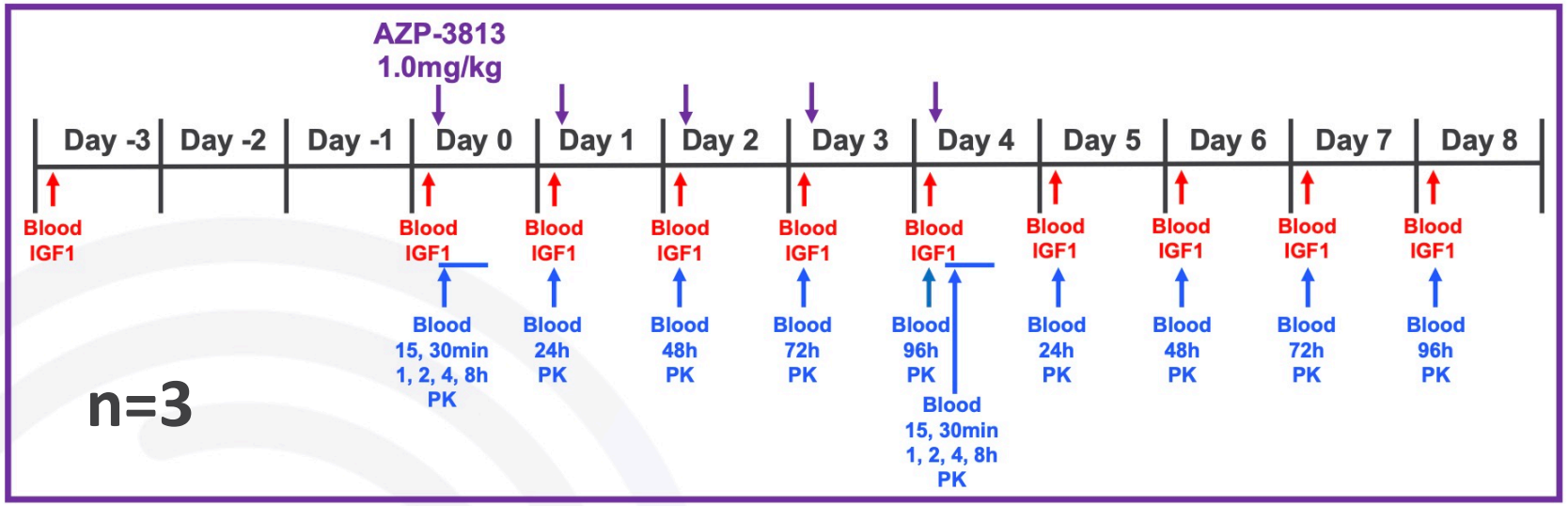
AZP-3813 – GH Receptor Antagonist

AZP-3813: 16 Amino Acid, Bi-Cyclic Peptide

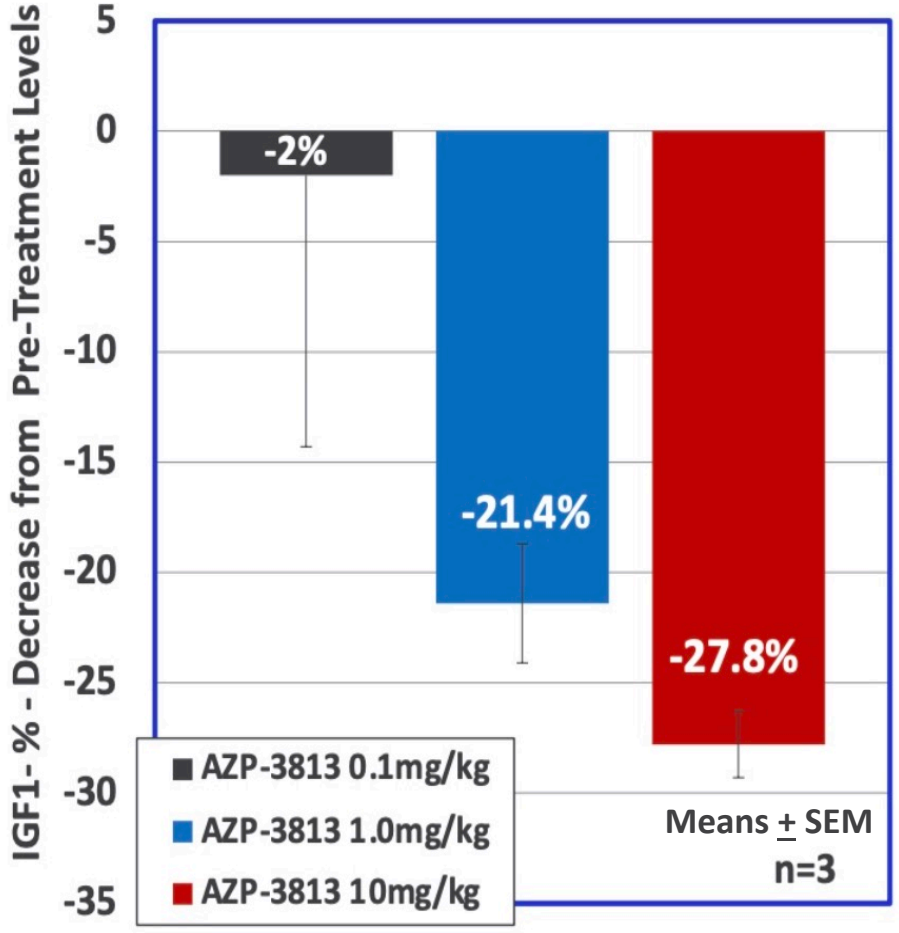
- MW = 2479.9
- hGH-R affinity (K_D) = 2.9nM
- hGH-R antagonism (IC_{50}) = 9.9nM

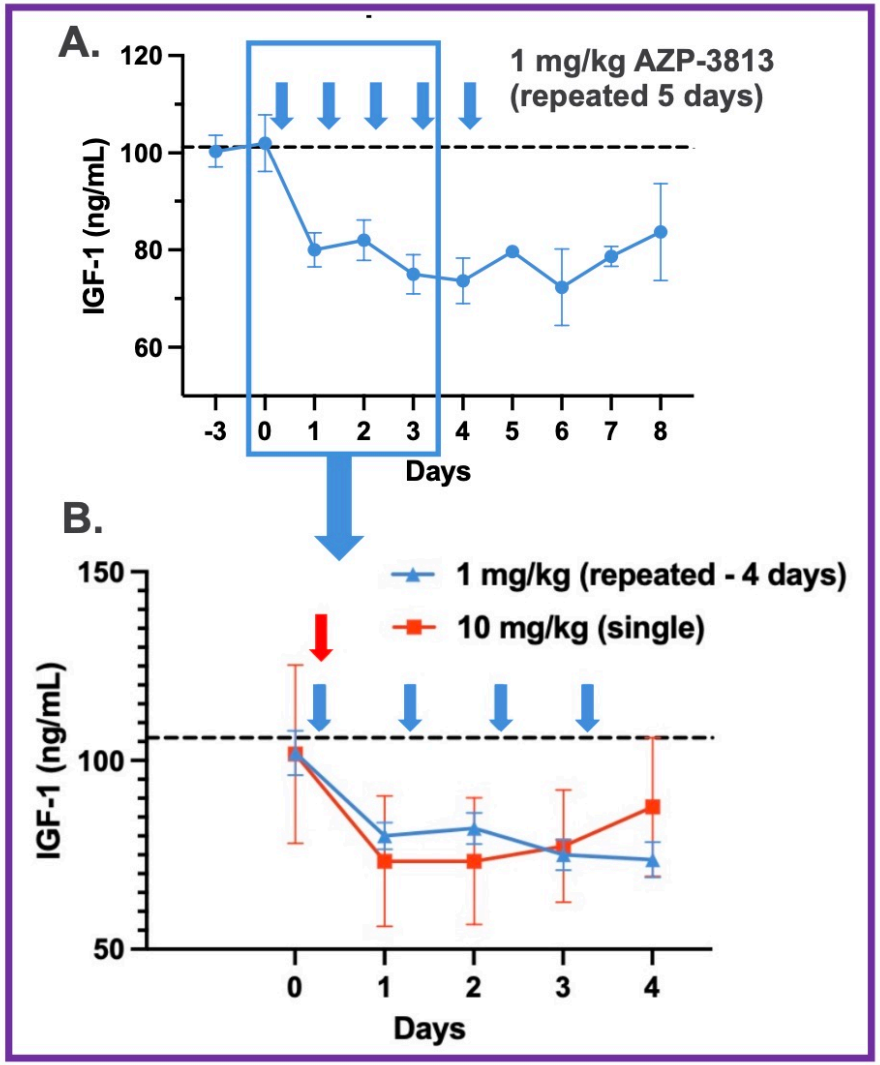
Study Plan to Test AZP-3813 in Beagle Dogs





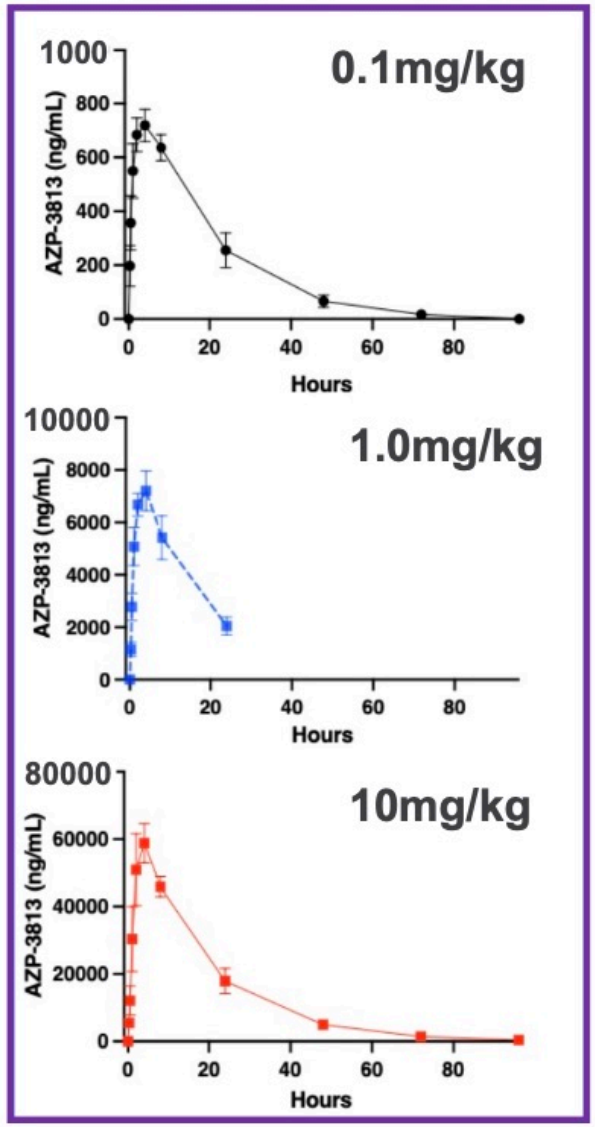
Dose-Related and Sustained Suppression of IGF1 in Beagle Dogs

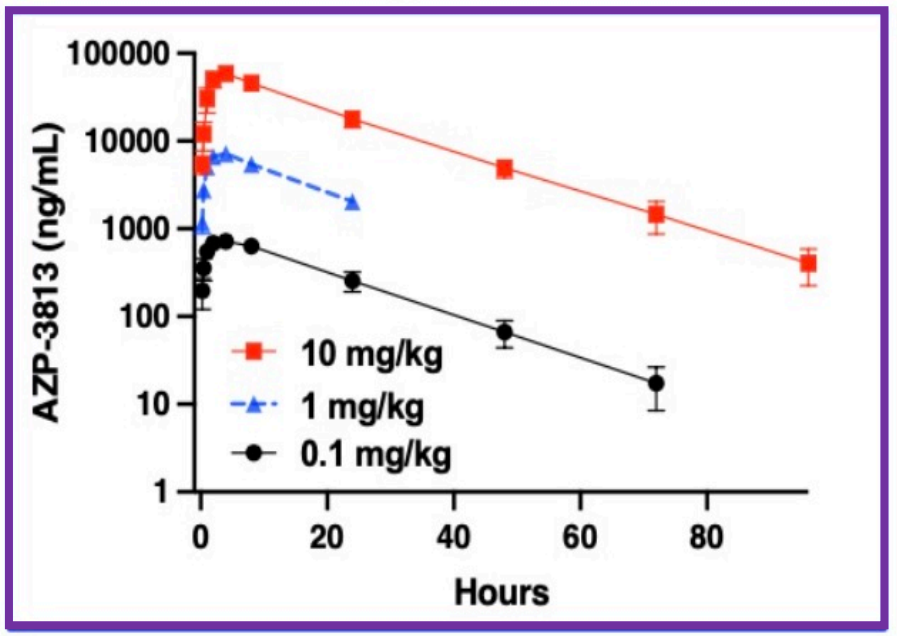




AZP-3813 Pharmacokinetics in Beagle Dogs

Increasing doses of AZP-3813 produce linear increases in blood concentration





Increasing doses of AZP-3813 produce parallel elimination curves

Dose	Half-Life (h)
0.1mg/kg	15.1
1.0mg/kg	13.2
10mg/kg	14.3

Mean circulating half-life = 14.2 ± 0.47 hours

AMOLYT PHARMA

Conclusion

The results of the current study demonstrate that the potent GH receptor antagonist activity exhibited by AZP-3813 translates to effective, sustained in vivo suppression of IGF1 levels in normal Beagle dogs, and further support the development of AZP-3813 as a potential therapy for acromegaly

For more detail, please visit our poster: RC 7.3

AZP-3813, a Bicyclic, 16-Amino Acid Peptide Antagonist of the Human Growth Hormone Receptor, Effectively Suppresses IGF1 in Beagle Dogs

Guillaume Ravel[1], Clémentine Chalmey[1], Corentin Berardet[1], David Duracher[1], Haruaki Kurasaki[2], Tatsuya Tomiyama[2], Patrick Reid[2], Michael D. Culler[1]

AMOLYT PHARMA

Thank you!