Backgrounder:

Caplacizumab, anti-vWF Nanobody® for the treatment of aTTP

Ablynx, a leading clinical-stage next generation biological medicines company, is developing caplacizumab as an innovative first-in-class therapeutic for the treatment of acquired thrombotic thrombocytopenic purpura (aTTP), a life-threatening, ultra-rare, acute blood clotting disorder. Caplacizumab is an investigational medicinal product and has not yet received regulatory approval. Following strong results from the 75 patient TITAN study, the dossier for conditional approval will be submitted in Europe in 2017. Caplacizumab recently entered into a Phase III study which is expected to enrol 92 patients in multiple sites across 17 countries (with top line results anticipated end 2017) to support BLA filing in the USA.

- First-in-class bivalent Nanobody with Orphan Drug Status and patent protection up to 2035
- Developed to treat acquired thrombotic thrombocytopenic purpura
- Filing expected in H1 2017 for conditional approval in Europe based on Phase II results
- Phase III study started in Sep 2015 to support BLA submission in USA (expected in 2018)
- Ablynx committed to lead commercialisation in Europe and USA; first launch anticipated in 2018
- Peak sales potential of ~€300M

aTTP – life-threatening acute blood clotting disorder

- Insufficient ADAMTS13 activity (<10%) leaves vWF uncleaved (ULvWF), causing excessive platelet aggregation
- Auto-immune disorder that leads to uncontrolled clotting in small blood vessels (micro clots), causing tissue damage
- Ultra-rare disease
  - incidence of up to 11/million
- High unmet medical need
  - no therapeutic drug specifically approved for this indication
  - mortality high (10-30%) (mainly within 2 weeks post diagnosis) and ~ 36% of patients relapse
  - major morbidities after TTP episode, including vital organ damage
  - current standard of care is plasma exchange (PEX) plus immune suppressants but **high need for a therapeutic that immediately inhibits micro clot formation in acute phase of the disease**

Phase II study in 75 patients – strong clinical POC

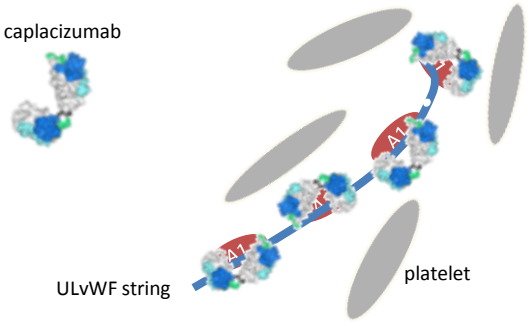
Time to platelet normalisation	Caplacizumab	Placebo
Median days (95% CI) **No prior PEX**	**3.0** (2.7, 3.9) N = 34	**4.9** (3.2, 6.6) N = 35
Median days (95% CI) **One prior PEX**	**2.4** (1.9, 3.0) N = 2	**4.3** (2.9, 5.7) N = 4

Number of subjects	Caplacizumab	Placebo
Subjects with recurrence within 30 days after stopping daily PEX	**3** (8%)	**11** (28%)
Deaths	**0**	**2**

- Primary endpoint met (p=0.005)
- 40% reduction in time to platelet normalisation
- 71% fewer patients with recurrences during treatment
- Acceptible safety profile (manageable mild bleeding tendency)

Caplacizumab unique mode of action

Caplacizumab prevents binding of platelets to ULvWF by binding to A1 domain of vWF, resulting in:



- Immediate inhibition of micro clot formation
- Prevention of further platelet consumption
- Faster platelet normalisation

Caplacizumab's unique mode of action may

1) protect patient during acute TTP episode
2) prevent recurrence until underlying cause of disease has been resolved
3) prevent further micro clot formation and related organ damage (leading cause of morbidity and mortality)
4) reduce days and volumes of PEX
5) shorten the duration of life-threatening TTP episodes and ICU stays

Caplacizumab commercial presentation form

- Lyophilised formulation
- Storage at 2-8°C for up to 52 months
- Self administration
- Manufactured in *E. coli*