

Additional file 1

Using skin biopsies to measure target occupancy of anti-fibrotic molecules: Assay development and application for zampilimab in a primate model of chronic kidney disease and in healthy human volunteers

Dr Linghong Huang*[†], UCB, Slough, UK (lhhuang18@yahoo.com)

Dr Rowann Bowcutt*, UCB, Slough, UK (rowann.bowcutt@ucb.com)

Ms Alison Bigley[§], OracleBio, Biocity, Scotland, UK (alison.bigley@googlemail.com)

Prof Graham Ogg, MRC Human Immunology Unit, University of Oxford, Oxford, UK
(graham.ogg@ndm.ox.ac.uk)

Dr Tim Schmidt[‡], UCB, Slough, UK (tim.sebastian.schmidt@gmail.com)

Dr Geoffrey I Johnston[§], UCB, Slough, UK (Geoff_Johnston@Yahoo.com)

Prof Timothy S Johnson[†], UCB, Slough, UK (t.johnson@sheffield.ac.uk)

*These authors contributed equally to this work

Current affiliations: [†]Mestag Therapeutics Ltd, Cambridge, UK; [‡]Senisca Ltd, Exeter, UK

[§]These authors have since retired from their places of employment

Corresponding author: Dr Rowann Bowcutt, UCB, Slough, UK (rowann.bowcutt@ucb.com)



Fig. S1 Sequence alignment between human and cynomolgus monkey TG2 protein

Sequence alignment demonstrates that zampilimab, IA12 and DH2 are 100% conserved between human and cynomolgus monkey TG2

Monoclonal antibody locations:

- Zampilimab (blue box): in front of active site – substrate binding pocket (aa 304–326)
- IA12 (red box): epitope encompasses an amino acid in the catalytic triad (aa 372–409)
- DH2 (orange box): rear of core, junction with β -barrel 1. Encompasses calcium binding site (aa 450–467)

Abbreviations: aa amino acids, TG2 transglutaminase 2