### Novel Diagnostics for Systemic Lupus Erythematosus

**Nanoscale Immunoactive Protein - Quantification**

Our goal is to create a diagnostic and prognostic tool that will benefit patients suffering from systemic lupus erythematosus (SLE). Our primary focus is companion diagnostics. This will increase the value of new drug candidates and focus existing treatment on patients with the best outcome.

### Technology Description

Our research team at Dept. of Biomedicine has identified Mannan Binding Lectin (MBL) as a superoligomeric protein upregulated in patients with SLE. The size distribution of large MBL particles is increased in patients with SLE. We see a large spread among patients reflecting the heterogeneity of the patients and the need for sub classification. The concentration of these large complexes are also correlated with the disease activity of the patients reflected by the SLE disease activity index (SLEDAI) score.

This correlation between a biochemistry biomarker and SLEDAI is novel within SLE diagnosis and opens the possibility of using this technology for prognostic purposes.

### Intellectual Property Rights

We have submitted (Nov. 2019) a patent for application of NIP-Q in SLE. We will investigate the possibility of strengthening or IP with additional data and correlations with clinical and biochemical data of the patients. Our main focus is SLE, but we have shown, that NIP-Q has great applicability in diseases involving superoligomeric proteins. Therefore, we are watchful of new potential IP that needs protection.

### Current State

Following completion of Proof-of-Concept, we plan to continue NIP-Q development via soft funding. This phase would allow us to work towards a more direct application of NIP-Q in a commercial setting and develop a full business case for a future biotech spin-out.

### Business opportunity and Call to action

We seek partnering opportunities with stakeholders within SLE treatment and diagnostics. This will allow us to continue development of NIP-Q technology towards a specific clinical need.

Furthermore, we seek investors that can help facilitate the establishment of NIP-Q as an independent biotech start-up company.

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