

## FOR IMMEDIATE RELEASE

For more information:

ImmunoQure AG  
Dr. Edward Stuart  
Chairman of the Board of Directors

+49 (0)171 4091427  
edward.stuart@immunoqure.com

### **ImmunoQure AG announces publication in leading scientific journal of findings that enable companion diagnostic development for Interferon program**

**Düsseldorf, Germany April 18, 2017.** ImmunoQure AG, a German biotechnology company focused on the development of autoantibodies as therapeutics to treat common human diseases today announced the publication of data in the leading scientific journal *The Journal of Experimental Medicine*. In a World's-first, the authors have developed a system by which interferon- $\alpha$  (IFN $\alpha$ ) levels can be measured in serum, plasma and cerebrospinal fluid. Interferon was identified over 60 years ago but could not be directly measured until now because it is present in such small amounts, indicating how powerful a cytokine it is. Furthermore, Interferon plays a fundamental role in health and disease.

Using single-molecule array (Simoa) digital ELISA technology, the authors recorded attomolar ( $10^{-18}$  mol) concentrations of IFN $\alpha$  in healthy donors, viral infection, and complex and monogenic interferonopathies. IFN $\alpha$  protein correlated well with functional activity and IFN-stimulated gene expression. High circulating IFN $\alpha$  levels were associated with increased clinical severity in SLE patients, and a study of the cellular source of IFN $\alpha$  protein indicated disease-specific mechanisms. Measurement of IFN $\alpha$  attomolar concentrations by digital ELISA enhances our understanding of interferon biology and potentially improve the diagnosis and stratification of pathologies associated with IFN dysregulation. Furthermore, having the ability to quantify IFN $\alpha$  will permit patient stratification in clinical trials such that only those patients with measurably elevated IFN $\alpha$  are included in trials with IFN $\alpha$  modulators such as ImmunoQure's lead program – IQ004-19D11, leading to an increased probability of success.

#### **Publication**

Rodero, M.P., et al., Detection of interferon alpha protein reveals differential levels and cellular sources in disease. *J. Exp. Med.* 214, 1547–1555 (2017).  
<https://doi.org/10.1084/jem.20161451>

#### **About ImmunoQure AG**

ImmunoQure was founded by a consortium of leading researchers from the Universities of Tartu, Estonia and Helsinki Finland, King's College, London UK, the APECED patient support charity APECED Oy and HS LifeSciences, Düsseldorf, Germany. ImmunoQure is financed by QureInvest II (SCS) SICAR, a specialist European life sciences entrepreneurial investment fund advised by HS LifeSciences GmbH, Düsseldorf, Germany.

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