## RealHOPE - Real World Handling of Protein Drugs: Exploration, Evaluation and Education.

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Many new medicines are based on proteins, which have improved the lives of people with a range of diseases. The development, production, distribution, and handling of these drugs still present challenges that need to be addressed to generate further evidence on stability, and therefore safety and efficacy during handling in use.

The RealHOPE project focuses on creating an understanding of the real-life handling of protein drugs in hospital/community pharmacies, clinics, transportation and in the hands of patients. Our research covers in-use aspects of protein pharmaceuticals, investigating the critical steps where stability can be compromised. With the goal to support a safe and efficient use, we will develop tools for simulation of real-life events, mitigation of critical handling steps, and tailored education to ensure careful handling by healthcare and pharmacy staff as well as patients and caregivers.

The project will include measurements of real-life handling during transportation and by healthcare personnel and patients using smart tag technologies. The data will be used to develop new methods to simulate real-life events. The project also includes interviews with stakeholders to create a better picture on how protein drugs are handled today and how to educate stakeholders in the future.

RealHOPE is an IMI2-funded project that brings together 24 partners across EU, UK, Switzerland, and USA, representing major pharma companies, academia, hospital pharmacies and clinics, patient organisations as well as SMEs in logistics, analytical tools, and apps for education and disease monitoring. This presentation will introduce the project and the multidisciplinary approach to improve the use of protein drug products.