Computer simulations are considered standard technology in many industries like Automotive, Engineering and Aeronautics, but they are generally poorly established in the healthcare sector. At the same time, pharmaceutical and medical device companies are facing the challenges of exponential growth of research and development costs, of high attrition rates and of inefficient development processes. Since more than a decade, the US Food and Drug Administration agency has indicated Modeling and Simulation as a technological solution which can help to contain development costs and which can enable data-driven decisions and the optimization of development plans. InsilicoTRIALS is the first web-based, cloud-based platform that provides healthcare companies and researchers with easy-access and ready-to-use computational models to perform simulations for pharmaceutical and medical device development and approval processes. The features of the platform ensure that no highly-specialistic knowledge is required to run the models, leading to a democratization of the simulations. Individualized simulations and post-processing are performed in public or private cloud, to streamline the design and development process. Users can securely share their data models with project partners, simulation parameters, and results through the digital library. Use case examples pertaining the pharmaceutical area of biologics including, but not limited to an estimation model for colloidal interactions and protein aggregation propensities will be presented and discussed.

Biography
Roberta Bursi has obtained her PhD in Computational Chemistry at the University of Southern California, Los Angeles, USA. She is a Biopharmaceutical Professional with twenty years experience in modeling and simulation implementation and deployment across research and development organizations of medium- and large-sized multinational pharma companies aiming at delivering innovative medicines to patients. She is the author of more than 30 peer-reviewed scientific publications, inventor of 4 patents and Project Management Professional (PMP) certified by the Project Management Institute, USA. She is currently the Vice President Model Informed Drug Discovery Development at InsilicoTRIALS LLC.

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