Making Medicine Modern –
In silico medicine and the Avicenna Alliance

Predictive or in silico medicine is the use of individualised computer simulations in all aspects of the prevention, diagnosis and prognostic assessment of disease and development of treatments.

The Avicenna Alliance is an association of industry and researchers organisations, who have a commercial or research interest in predictive or in silico medicine.

The foundations of our healthcare systems today are based on the limitations of the pre-digital era and an acceptance that we do not have the capacity to understand the human body on a scale necessary to provide personalized treatments.

With the advent of the digital era, our ability to turn gargantuan quantities of raw data into useable information requires that we re-think these assumptions and the policy structures that enable them.

In silico medicine is poised to do for healthcare what the internet did for communication. We can usher in a golden era in healthcare, but only if we modernize health policy to enable this field. This modernization will come from the Members of the Avicenna Alliance interest in predictive or in silico medicine.

What is Avicenna Alliance?

The Avicenna Alliance, is an association of industry and research organisations who have a commercial or research interest in predictive or in silico medicine.

Supported by

RPP Group


As the Secretariat of the Avicenna Alliance, RPP Group brings expert policy guidance to this revolutionary new field.

www.rpp-group.com

‘In the 1st year of operation, the Alliance has the European Commission, the FDA and the European Parliament all at the same table getting involved in this discussion’

MEP Seán Kelly (EPP, Ireland)

‘The FDA has recognized an important role for Modeling and Simulation to advance regulatory science and its strategic priorities’

Dr. Tina Morrison, U.S. Food and Drug Administration

‘We need input from researchers, industry, doctors, patients and stakeholders to ensure the legal framework fits the purpose’

MEP Nicola Caputo (S&D, Italy)

‘The VPH will revolutionize the way health knowledge is produced, stored and managed and in which healthcare is currently delivered’

The European Commission
Avicenna Alliance long-term vision

- Common policy framework for the validation of *in silico* models
- Agreement on “international guidelines” for *in silico* models that can be adapted to different regulatory frameworks
- Encouraging policy makers to learn from the past-Making strict rules for devices and medicinal products does not mean regulating them the same way
- Avicenna to become a forum for industries, researchers and regulators around the world to discuss *in silico* medicines

What we offer

**Policy Development**
- Drive forward your company’s goals through 3 distinct working groups – Policy Development, Research and International WGs, each with a programme designed to put Member interests on the policy agenda.

**Understand your sector’s politics**
- With monthly newsletters and regular political updates, stay ahead of the curve by understanding the latest policies and political developments impacting your business.

**Network**
- Provision of a wide membership network of industry actors and research organisations pioneering in predictive medicine.

**Visibility**
- Political and public visibility of being at the forefront of this new medical research sector.

**Members’ Publication**
- Each member will be invited to submit case studies to be published on the Avicenna Alliance website.
- Members’ articles on *in silico* medicine are encouraged and can be published on the Avicenna Alliance website and/or on the Alliance’s social media.

What does *in silico* mean for ...

**... pharma?**
- Vastly reduced research costs of clinical trials and assessment of compounds;
- Avoid costly investments in medicinal products that fail at a late stage and instead, identify early which compounds are the most promising;
- Move healthcare from exploratory trials in humans to models which confirm what was predicted *in silico* and avoid adverse reactions;
- Reflecting real world evidence in decision making across the entire development lifecycle.

**... medical devices?**
- Ability to demonstrate long term efficacy and safety of complex devices;
- Test scenarios *in silico* which would be impossible or unethical to test in humans.

**... software?**
- A huge new market in which software industries can expand;
- Possibility to provide the necessary high-throughput computing and software necessary for industries to revitalize the healthcare industry.

Sounds relevant for your company?

Membership is open to industries and research organisations. To find out how membership of the Avicenna Alliance could benefit you, contact Thierry Marchal, Secretary General at secgen@avicenna-alliance.com

For more information:

avicenna-alliance.com  @AvicennaAlly  In Silico Medicine Network