



an IQVIA business

GCE SOLUTIONS

Derive Value from Excellence ...

The Future of Clinical Trial Programming

Arnold van Aswegen

Principal Statistical Programmer



an IQVIA business

Overview



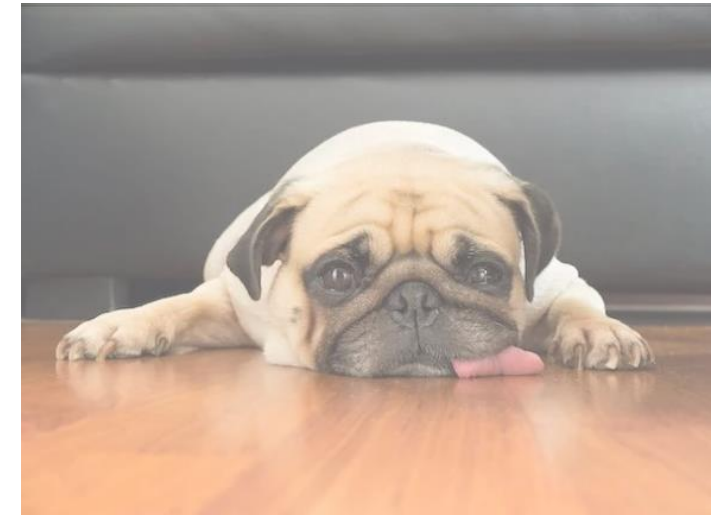
- Past and present trial design
- Future trial designs
- Is fiction so far off?



an IQVIA business

Past and present trial design

- **Past trial design:**
 - Time consuming
 - Patient enrollment
 - Less industry standards required
 - Expensive
- **Present trial design:**
 - Experience and references for previous trials
 - Technology benefits
 - Patient enrollment
 - More industry standards required
 - Expensive

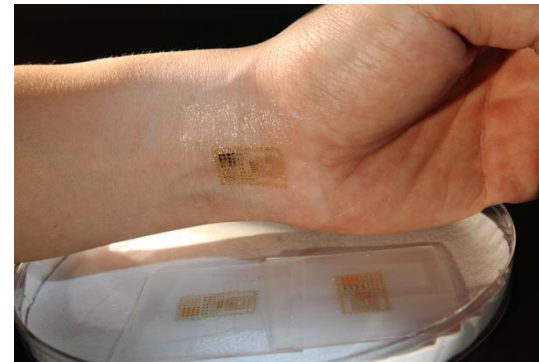
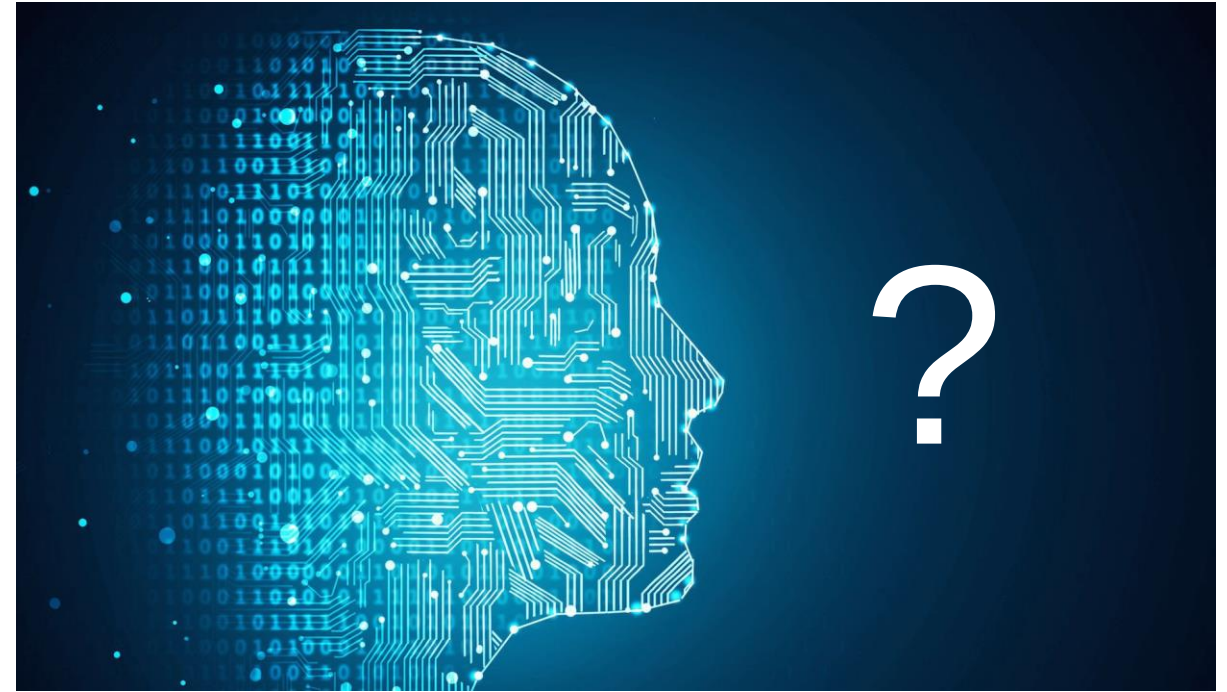




an IQVIA business

Future trial designs

- **Technology:**
 - Digital health
 - Virtual clinical trials
 - Synthetic control arms
 - Machine learning
 - Apps and social media
- **Benefits:**
 - Patient and Investigator
 - Standards
 - CRO's
 - Programmers

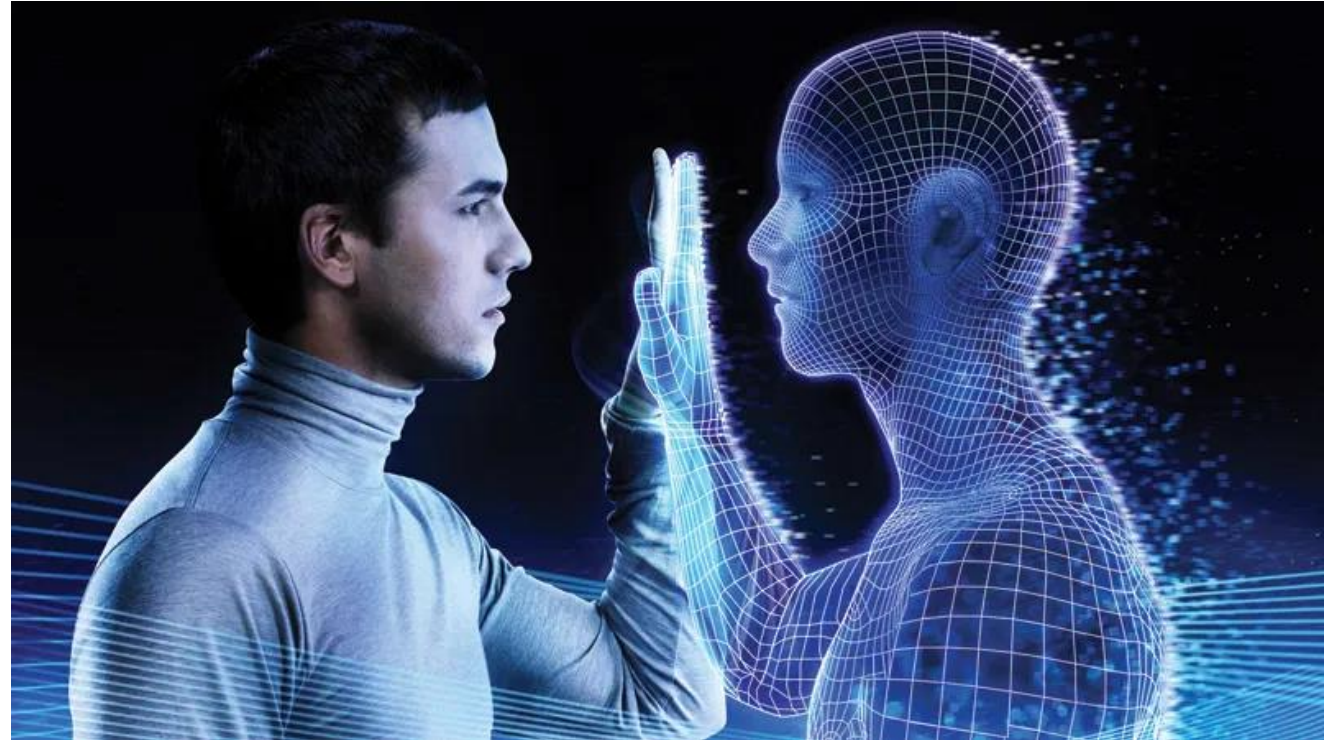




an IQVIA business

Is fiction so far off?

- **Simulations:**
 - Drug
 - Patient
- **Potential:**
 - Reduced trial duration
 - Reduced cost
 - Less resources





an IQVIA business

Conclusion

- **Exciting time for clinical trials**
- **Digital technologies can improve clinical research**
- **Future of clinical trial programming**



an IQVIA business

Thank you



an IQVIA business



Questions?