The age of human augmentation is upon us: it is now possible to enhance the human body and mind and to modify human reproduction. While there are exciting benefits, the technology also gives rise to social, moral and ethical questions and new risks for re/insurers due to unknown long-term consequences and lack of precedents.

3 types of human enhancement:

- **Mechanical**
- **Biological**
- **Temporal**

**Cosmetic Enhancement**

Cosmetic surgeries such as liposuction, rhinoplasty and breast augmentation allow people to ‘upgrade’ their body aesthetically.

23 million cosmetic and nonsurgical procedures were performed worldwide in 2013.

**Exoskeletons**

People can now wear mobile armour powered by a system of motors and hydraulics to boost strength and endurance.

Exoskeleton systems can lift up to 50kg in each hand and exert ten times the force a user applies to an object.

**Egg Freezing and Embryo Selection**

Cryopreservation allows a woman’s eggs to be extracted, frozen and stored. Embryo screening allows for gene selection and the possibility of designer babies.

88% of egg freezing procedures among US women in 2013 were due to a lack of a partner.

**Nutraceuticals**

Neuro-enhancing foods can be consumed to improve memory and cognitive function.

Globally, the nutraceutical industry is predicted to reach a staggering USD 221 billion by 2018.

**What are the issues?**

**Regulation**

There is no single way in which people will choose to augment themselves. To what extent do we allow people to make these choices for themselves in such an open playing field?

**Public Acceptance**

It is difficult to predict which of these enhancements will be accepted by the public over time. Will people be coerced to try these new technologies by businesses and peer groups?

**Liability**

Lines will have to be drawn before new technologies come to market. Who is liable when people start to augment their body with new drugs and technologies and something goes wrong?

**Ethics**

The social, moral and ethical questions posed by human modification are huge. Will they lead to greater social disparity? Will modified people gain unfair competitive advantage?

Come discuss: openminds.swissre.com