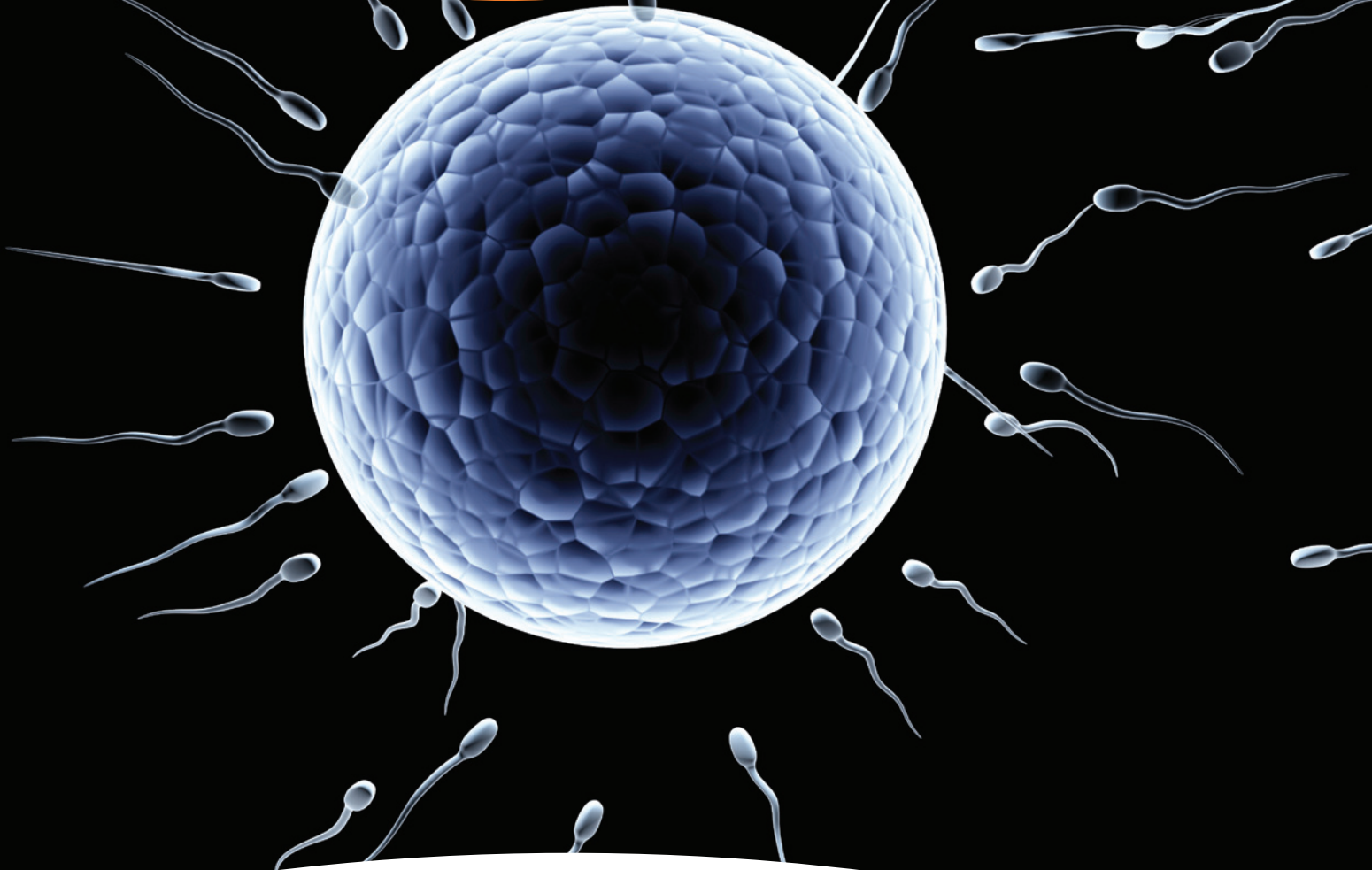


IVF



IVF (*In vitro* fertilisation) is the fertilisation of eggs outside the body. It was first carried out successfully in humans in 1977 and has now become a routine process for treating couples who are unable to conceive naturally.

### **IVF consists of many steps, which are outlined below:**

- **Ovarian stimulation:** The woman has her ovaries stimulated with hormones (usually as daily injections), so that she grows multiple eggs, rather than the single egg usually seen on a natural cycle. A trigger injection, approximately 36 hours before egg collection, helps the eggs to go through the last stages of development.
- **Egg collection:** Eggs are retrieved either under local or general anaesthetic, and are placed into a specialist fluid (culture medium) in an incubator in the lab.
- **Sperm production:** The man is asked to produce a semen sample, which is then prepared so that only the healthiest sperm are used for the IVF.
- **Insemination:** Sperm and eggs are incubated together overnight and the eggs checked the next day for fertilisation.
- **Embryo development:** Fertilised eggs develop into embryos and are grown in the incubator for up to 6 days.
- **Embryo transfer:** The best embryo(s) are selected and are placed into the womb using a thin plastic tube called an embryo transfer catheter. This is usually a quick and painless procedure, performed without sedation.
- **Embryo freezing (cryopreservation):** Any spare good quality embryos are frozen for future use.
- **Pregnancy test:** Approximately 2 weeks after egg collection.

Sometimes donor eggs or sperm are used for couples who cannot produce their own, or whose eggs or sperm are poor quality.