* What is facial tumour disease? Keep it brief, I will not read anything beyond 30 words, notes are fine!

A form of transferable cancer, causing tumours to grow around the face and lead to eventual starvation, no virus involved in the spread of the disease-direct contact is necessary.

* What is life expectancy once tumours show?

Once is animal infected and tumours develop around the head and mouth of the host, the life expectancy is in most cases 6–12 months with 100% mortality.

* It's spread by biting during mating and fighting over food; the cancer spreads from bitten to biter - how can we know this is the direction of spread?

The research suggest that we know it through the study when DFTD cells have been identified on the teeth of diseased devils and the penetrating bites can transfer DFTD cells.

* How do we know that it is infectious rather than caused by an environmental factor?

Pattern of spread is consistent with an infectious disease, rather than a disease caused by carcinogens present throughout the state.

* Why doesn't the immune system of the devils recognise non-self cells? There is some very recent evidence on this from 2019 so make sure you are looking at up to date reports. Keep this brief!  no more than 50 words.

It is because tumour cells have a very low amount of cell surface major histocompatibility complex (MHC)-I molecule expression. As MHC molecules allow immunity to detect pathogen, without them the cancer is “invisible”.

* What impact has the disease had on the size of the population and on its age structure? Again, be brief, this only needs a very short overview.  max 60 words.

Since 1996, the disease has caused overall population declines of 77%, with local declines in excess of 90%. As devils typically reach their sexual maturity at the age of 2 years, so the intensive biting is occurring, it is expected that these age classes would be the most affected.

* Is there any sign of immunity developing? Be brief, just 50 words.

Yes, there is. The rapid evolutionary response of devils to DFTD (within 4–6 generations) may be the cause of the devils’ persistence in the wild. There have been reported several rapid changes in the genome in populations related to disease arrival.

* A second tumour disease was identified in 2014. What does this suggest about this species?

It suggests that Tasmanian devils are prone to transmissible cancers of the Schwann cell lineage.

Vaccination, translocation, fencing – very expensive, population reinforcement,

Outlook-extinct in 40years without vaccinaton