1. Is the AFL planning to put measures in place in the future to reduce head trauma for AFL players?

The AFL's Strategic Plan for Sport-Related Concussion in Australian Football 2022-2026 lists as one of the key strategic objectives to "reduce the incidence of avoidable forceful head contact and [sport related concussion] with interventions at each stage and level of participation in the game".

The AFL does this in many ways, including rule changes (noting that the AFL has made more than 30 rule changes to the AFL Regulations and Tribunal Guidelines since 2005 to assist in the deterrence of conduct causing or giving rise to the risk of head trauma (not limited to concussion) and to both encourage and enforce the change of behaviour on the field. As has been very apparent in the AFL's approach to dangerous tackles in recent seasons and the flow-on effect to community football, the health and safety of our athletes at all levels of Australian Football is of paramount importance.

2. Is the AFL investing in independent research related to repetitive head injury in AFL?

The AFL invests in a range of research relating to repetitive head injury. For example, the AFL has, in conjunction with Monash University, been piloting the HIT-IQ Nexus A9 instrumented mouthguard with AFL and AFLW players to measure exposure to repetitive head impacts. The main aims of the project are to investigate the validity, reliability and feasibility of mouthguard sensors in the measurement of head impacts in the sport of Australian football.

Further, the AFL is well progressed in the establishment of the AFL Brain Health Initiative (being the longitudinal study of head trauma in elite players) for which the AFL Commission has approved funding of \$25M over at least the next 10 years to measure the impacts of head trauma in our game through a variety of data collection and analysis techniques, including the mouthguard instrumentation, scanning and brain donation.

3. Is the AFL investing in independent research that uses the <u>expert consensus research</u> <u>diagnostic criteria</u> for traumatic encephalopathy syndrome (TES), the clinical disorder associated with neuropathologically diagnosed chronic traumatic encephalopathy (CTE)?

The AFL's Brain Health Initiative aims to include the opportunity for players to pledge to donate their brains to a brain bank to enable examination of factors that may contribute to neurodegenerative disorders of the brain, of which CTE is one.

4. What is the AFL's response to the evidence and submissions already heard in the Senate inquiry into concussions and repeated head trauma in contact sports?

There were 91 submissions filed with the Inquiry and four days of public hearings so it is difficult to provide the AFL's response to all such evidence and submissions.

However the AFL supports the Senate inquiry into concussions and repeated head trauma in contact sport as demonstrated by us having provided detailed <u>submissions</u> in response to the inquiry's terms of reference and by having Andrew Dillon (CEO Elect), Dr Michael Makdissi (AFL Chief Medical Officer) and Stephen Meade (General Counsel and General Manager Legal & Regulatory) attend the Melbourne hearing to answer questions from the Senators on that inquiry and to further provide written answers to questions on notice.

5. Boston University neurologist, Professor Robert Stern, says "CTE is not concussions" – he acknowledges that concussions play a part, but they're not predictive of having CTE. It's more about the repetitive head trauma and sub-concussive impacts without symptoms: "Concussions are something leagues, and the owners can do something about because they're measurable: you can count them, you can change something to improve the management of them, or diagnosis of them," Professor Stern said. "It's important to do something to reduce concussions, but when it comes to long-term consequences, I think focusing on concussions takes away from the much, much more important issue."

The AFL's position in relation to non-concussive head trauma and CTE was most recently clearly set out in our submission to the Senate inquiry:

The AFL acknowledges that there is an association between head trauma and neurodegenerative disease (including chronic traumatic encephalopathy – neuropathological change - CTE-NC).

The AFL supports and adopts the recent statement on CTE-NC by the National Institutes of Health (being part of the U.S. Department of Health and Human Services and the nation's medical research agency):

Chronic traumatic encephalopathy (CTE) is a delayed neurodegenerative disorder that was initially identified in postmortem brains, and research-to-date suggests, is caused in part by repeated traumatic brain injuries.

The AFL also endorses the view expressed by the Concussion in Sport Australia Position Statement prepared by the Australian Institute of Sport, Australian Medical Association, Australasian College of Sport and Exercise Physicians and Sports Medicine Australia that further exploration of the potential link between concussion and/or repeated head impacts and CTE-NC is needed through "well-designed prospective epidemiological studies that take into account the potential confounding variables".

The AFL is committed to furthering and supporting research into an increased understanding of concussion (and repeated head impacts), neurodegenerative disease and CTE-NC as may exist in our sport and more generally.

Further detail in relation to the AFL's various research projects are set out in the AFL's submission to the Senate inquiry.