**Supplementary Appendix 1**

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| **22q11.2 Associated Area**  | **Role** | **Effect** |
| **PRODH** | Codes for proline dehydrogenase and is involved in the synthesis of glutamate from proline (Thompson et al, 2017) | Alterations in glutamate metabolism (Thompson et al, 2017). |
| **DGCR8** | Used in the processing of micro RNA maintains mRNA transcripts within a set range (Thompson et al, 2017) | Synaptic alterations and neuronal architecture changes (Thompson et al, 2017) |
| **ZDHHC8** | A gene primarily expressed in the neocortex, olfactory bulb and cerebellum, the SNP rs175174 results in a premature stop codon (Thompson et al, 2017) | Altered neuronal architecture (Thompson et al, 2017). |
| **GNB1L** | Encodes a G-protein beta subunit like polypeptide, expressed in the cerebral cortex, hippocampus and cerebellum (Thompson et al, 2017). | Role in neurodevelopment (Thompson et al, 2017). |
| **TBX1**  | Abnormal transcription factor (Keshavan et al, 2015). | Interferes with synapse structure, linked with impaired cognitive flexibility and fixed delusions (Keshavan et al, 2015).  |
| **PIK4CA**  | Enzyme regulates synaptic transmission. Associated with schizophrenia in both those with and those without 22q11.2 deletion syndrome (Thompson et al, 2017). | Implicated in neurodevelopment and synapse transmission (Thompson et al, 2017) |
| **RTN4R**  | The RTN4R gene encodes for the reticulon 4 receptor (also known as the Nogo-66 receptor). This plays a role in the inhibition of axonal growth (Thompson et al, 2017). | Linked to impairments in visual spatial functions and axonal growth (Thompson et al, 2017). |