**Supplemental Figure 4:** Summary of the tetrahydrobiopterin pathway



 5-HIAA HVA

**GTPCH=** guanosine triphosphate, **PTPS=** pyruvoyl tetrahydropterin synthase, **SR=** sepiapterin reductase, **DHFR=** dihydrofolate reductase, **DHPR=** dihydropteridine reductase, **PCD=** pterin carbinolamine 4-dehydratase, **CR=** carbonyl reductase, **AR=** aldose reductase, **AAAH=** aromatic amino acid hydroxylase, **AGMO=** alkyl-glycerol monooxygenase, **NOS=** nitric oxide synthase, **AAAD=** aromatic amino acid decarboxylase, **ALDH=** aldehyde dehydrogenase, **DβH=** Dopamine-β-hydroxylase, **AKG=** alkylglycerol, **5-HIAA=** 5-hydroxyindoleacetic acid, **HVA=** homovanillic acid, **5-HIAL=** 5-hydroxyindoleacetaldehyde, **MAO=** monoamine oxidase, **DOPA=** levodopa, **5-OH-Trp=** 5-hydroxy tryptophan, **Tyr=** tyrosine, **Trp=** tryptophan, **Phe=** phenylalanine, **TH=** tyrosine hydroxylase, **TPH=** tryptophan hydroxylase, **PAH=** phenylalanine hydroxylase, **DOPAL=** dihydroxyphenylacetic acid, **COMT=** catechol-O-methyltransferase, **PNMT=** phenylethanolamine n-methyltransferase.