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COMPLEX I FUNCTION IN MITOCHONDRIAL SUPERCOMPLEXES

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1. Types and stoichiometry of Complex I-containing respiratory supercomplexes
2. Evidence for channelling between Complex I and Complex III
 - 2.1. Metabolic flux control analysis
 - 2.2. Evidence for rate advantage
 - 2.2.1 *Collision-based electron transport: the “pool” behaviour*
 - 2.2.2 *Fixed assemblies: stoichiometric behaviour*
 - 2.2.3 *Dissociation of supercomplexes shifts channelling to a less efficient pool behaviour*
 - 2.3. Separate pools of Coenzyme Q and/or Complex III
 - 2.4. The case of reverse electron transfer
 - 2.5. Concluding evidence about channelling
3. Supercomplex assembly and ROS generation: a device for control of ROS levels?
4. Conclusions
5. Acknowledgements

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