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Interactions Of Different Sartans with the Bilayer Interface Studied by Sxas

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This work presents a thorough investigation of the interaction of the novel synthetic pyrrolidinone analog MMK3 and other SARTANS (losartan, valsartan and candesartan) with the model membrane system of dipalmitoyl-phosphatidylcholine (DPPC). SARTANS are designed to exert antihypertensive activity by functioning as an antagonist of the angiotensin II receptor of subtype 1 (AT₁). Small angle X-ray scattering (SAXS) experiments on the interaction of SARTANS with DPPC bilayers were carried out and results demonstrate that all studied SARTANS are well incorporated into the membrane leaflets and furthermore cause partial bilayer interdigitation. Further structural as well as dynamical effects will be discussed, and compared to their overall efficiency as antihypertensive drug.
