



TITOLO
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ORODISPERSIBLE FILMS CONTAINING LIPID MICROPARTICLES INTENDED FOR TASTE MASKING OR PROLONGED RELEASE

Autore (i)

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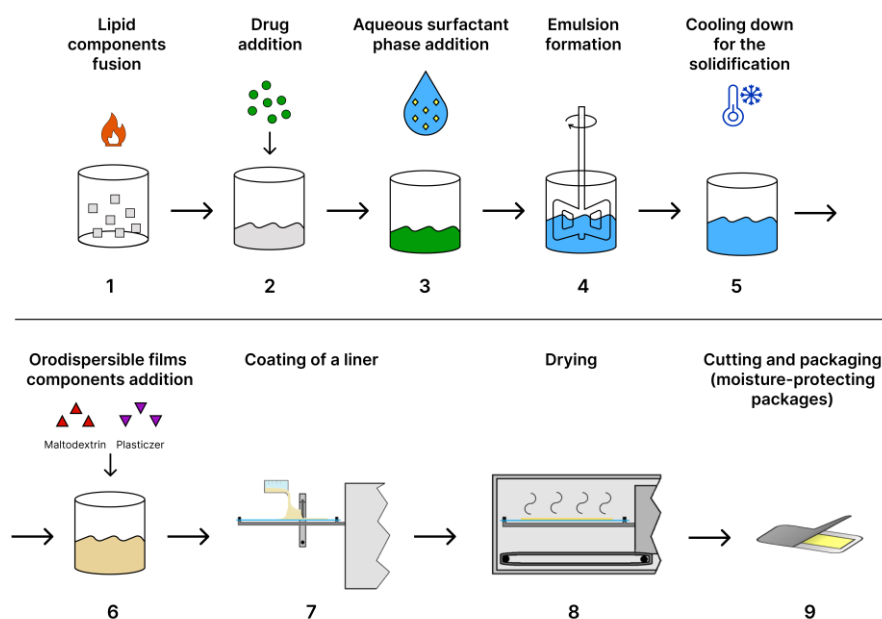
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Riassunto

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Orodispersible dosage forms disintegrate and/or dissolve rapidly upon contact with saliva after being placed on the tongue, and, therefore, allow the patient to swallow the drug in solution/suspension in saliva fluids rather than as an intact solid dosage form. Among these dosage forms, orodispersible films (ODFs) appear particularly attractive since they avoid the fear of choking, which is still relevant for the real-world use of orodispersible tablets or oral lyophilizates. Moreover, ODFs are well accepted by pediatric patients and their caregivers. From a formulative perspective, ODFs present some drawbacks, mainly related to the taste masking or the control of the drug release rate. In a previous work, we demonstrated the possibility of loading lipid microparticles, made of hydrogenated castor oil and prepared by spray congealing, in maltodextrin ODF. Moreover, *in vitro* release studies demonstrated the possibility to prolong the drug release over 5h [Musazzi U., et al. *Int. J. Pharm.* 559 (2019) 280–288]. Starting from this evidence, we explored the feasibility of simplifying the preparation of ODF containing lipid microparticles according to the process depicted below.



Preliminary results demonstrated that it is possible to micro-encapsulate diclofenac in a Witepsol/wax blend with a good efficiency (steps 1-5) and obtain homogeneous ODF (Steps 6-9) characterized by taste masking and fast drug release: 5 min (30%) 15 min (more than 90%) in a 0.1 N HCl medium. In the same way, the preparation of hydrogenated castor oil microparticles containing melatonin allowed a prolonged release ODF similar to that already demonstrated in the previous work.

IMPORTANTE: inviare il testo in formato (word o pdf) editabile e NON in formato immagine.

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