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# Development and Evaluation of Orally Fast Dissolving Film of Agomelatine

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**Abstract:**Orally Fast dissolving film (OFDF) is a dosage form which placed in the oral cavity, quickly gets hydrated, sticks onto the site of application and then disintegrates to release the drug. Agomelatine is an antidepressant also used for mood disorders such as anxiety and obsessive compulsive disorder. Fast dissolving films of Agomelatine were prepared by solvent casting technique. HPMC E-15 was selected as polymer because of its good water solubility. Polyvinyl pyrrolidone K-30(PVP K-30) as superdisintegrant and polyvinyl alcohol as film forming agent. Mannitol as sweetener and saliva stimulating agent used in the formulation. The compatibility of the drug in the formulation was confirmed by FTIR studies. A various concentration of polymers was used in order to optimize API concentration of the new dosage form. The orally fast dissolving film was characterized for weight, thickness, folding endurance, tensile strength and dissolution using *In-vitro* experimentations. The effect of PVA and PVP K-30 on drug release profile and film forming properties was investigated. Estimation of drug content of films was performed and the results were satisfactory. *In-vitro* dissolution studies revealed higher drug release from formulation F6 batch.

**Key words:**Orally fast dissolving film, Agomelatine, PVP K-30, PVA, Antidepressant.

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