**JOURNAL CLUB-DARIDOREXANT**

**INDICATION:**

* insomnia characterized by difficulties with sleep onset and/or sleep maintenance.
* Approved by FDA on 7 January 2022.

**CHEMICAL DESCRIPTION:**

* Molecular formula: - C23H23N6O2Cl \* HCl
* Molecular weight: 487.38 g/mol

**DOSAGE AND ADMINISTRATION:**

* Oral**,** Tablets: 25 mg, 50 mg.

**PHARMACOKINETICS:**

* Volume of distribution-31 L
* Half-life – 8 hours
* Bioavailability - 62%
* 99.7% bound to plasma proteins
* Metabolism:CYP3A4 (89%)
* Excretion:faeces 57%, urine 28% as metabolites
* **MECHANISM OF ACTION:**
* antagonism of orexin receptors. Blocking the binding of wake-promoting neuropeptides orexin A and orexin B to receptors OX1R and OX2R is thought to suppress wake drive.

**CONTRAINDICATIONS:**

* Narcolepsy

**ADVERSE DRUG REACTIONS:**

* Headache, somnolence, fatigue, nausea

**ABUSE LIABILITY & DEPENDENCE:**

* caution in drug users and alcoholics

**DRUG INTERACTIONS:**

* CYP3A4
* Alcohol, CNS depressants

**USE IN SPECIFIC POPULATION:**

* PREGNANCY: No data on human study.
* LACTATION: No data on human study.
* PAEDIATRIC: Safety and Efficacy had not been established.
* GERIATRIC: No dose adjustment required.
* HEPATIC IMPAIRMENT: Reduction of dose is needed in moderate hepatic impairment

**PHARMACOECONOMICS:**

* Available in US in different prices ranging from $5 to $1250 (single dose/multiple doses).

THANK YOU