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Provera

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PROVERA

Trade Names:
Depo-Provera, Depo-subQ, Provera 104, Provera

Chemical Names:
17a-Acetoxy-6α-methylprogesterone;
6α-methyl-17β-acetoxyprogesterone

Chemical Formula:
C_{29}H_{36}O_{4}

Medroxyprogesterone acetate

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Water Solubility:
Insoluble in water

Classification:
Progestin

Uses:
Labeled uses of medroxyprogesterone acetate include treating
dysfunctional uterine bleeding, secondary amenorrhea, and pain
associated with endometriosis. This parenteral form (Depo-Provera)
is used in adjunctive, palliative treatment of inoperable, recurrent,
and metastatic endometrial or ovarian carcinoma.

Unlabeled Uses:
The unlabeled use of medroxyprogesterone acetate is for the
treatment of obstructive sleep apnea.

Availability of Provera:
2.5 mg, 5 mg, 10 mg tablets, 104 mg/mL/0.65 mL, 150 mg/mL,
400 mg/mL injection

Molar Mass of Medroxyprogesterone Acetate:
24 mol C (12.0 g/mol C) = 290 g
34 mol H (1.0 g/mol H) = 34 g
4 mol O (16.0 g/mol O) = 60 g
290 g + 34 g + 60 g = 384 g

Molar mass rounded to 0 decimal places
384 g

What happens in your body when Provera has been absorbed?
Medroxyprogesterone acetate is absorbed into the bloodstream and
provides the body with estrogen and progesterone. These hormones
are important for the regulation of the menstrual cycle and
production of the ovary. The hormone is then broken down and
metabolized in the liver.

Body's Processing of Provera:
Medroxyprogesterone acetate is
labeled as a progestin or administered intramuscularly.

Provera can be used to treat
adults with Sleep apnea,
Route and Dosage: PO 20 mg t.i.d.
(An adult should take 20 milligrams
by mouth, three times daily).

Breakdown of Provera in your body:
Medroxyprogesterone acetate is metabolized (broken down)
in the liver.

How your body disposes of Provera:
Once medroxyprogesterone acetate
has made its way through the blood
stream and has been broken down
in the liver, the remains are
excreted through the urine.

Dosing & Molar Mass:
10 mg tablet
If a patient takes two 10 mg tablets three times daily, they will
consume 6 whole tablets.

Dose to Molecules:
20 mg C_{29}H_{36}O_{4} / (1000 mg/1 mol) x 384.52 g / 6.02 x 10^{23}
molecules/1 mol = 3.3 x 10^{-18} molecules of C_{29}H_{36}O_{4}

Dose to Tablets:
(20 mg dose/10 mg tablet) x 2 tablets for one dose
(2 tablets x 3 times daily = 6 tablets per day)