Interleukin-2 (IL-2), Aldesleukin

Brand name: Proleukin®
FDA approval: Yes
Manufacturer Link

Usage:

IL-2 is used to treat metastatic kidney (renal) cancer and metastatic melanoma. IL-2 is administered into a vein (intravenously). It may be combined with other drugs. It is also being investigated for its use in treating some lymphomas and leukemias.\(^1\)

Mechanism:

Interleukin-2 (IL-2) is a naturally occurring protein that is normally made by the body in small amounts. It allows cells of the immune system to communicate with each other. The drug, Proleukin®, is a man-made version of IL-2. This drug works by activating cells of the immune system (T lymphocytes) to attack and kill cancer cells.\(^1\)

The diagram above shows the 3D molecular structure of Interleukin-2 with its alpha receptor.


Side effects:

Interleukin-2 has a variety of side effects, including: nausea, vomiting, diarrhea, loss of appetite, sores in the mouth and throat, tiredness, weakness and dizziness.\(^1\)


Contraindications:

Patients need to have normal heart (cardiac) and lung (pulmonary) function as determined by a thallium stress test.