

[Open Peer Review on Qeios](#)

Water O-15

National Cancer Institute

Source

National Cancer Institute. *Water O-15*. NCI Thesaurus. Code C61999.

An inert, radiopharmaceutical of oxygen-15 (O-15) labeled water used as a tracer molecule with positron emission tomography (PET). Upon administration, water O-15 is freely diffusible and its distribution, as well as its clearance, are completely dependent on the rate of blood flow. Water O-15 can be imaged using PET to measure tissue or tumor blood flow/perfusion. This cyclotron product has a very short half life of about 2 minutes thereby allowing for multiple, serial measurements.