Iron-59: Used to study iron metabolism in the blood, particularly the spleen.

Cobalt-59: Used in many practical applications, including corrosion- and wear-resistant alloys, batteries, and catalysts.
Erbium-169

Used to treat pain in synovial joints due to arthritis

Thulium-169

Used in lasers, high-temperature superconductors, radiation monitoring, counterfeit bill detection
Chromium-51

Used to study and count red blood cells, diagnose gastrointestinal bleeding

Vanadium-51

Used to strengthen steel, as catalysts, in glass coatings and batteries
Fluorine-18

Used as a radiotracer for brain studies and positron emission tomography (PET) imaging

Oxygen-18

Used to study plant physiology, paleoclimatological changes revealed by ice cores taken from the Arctic and Antarctic
Holmium-166

Used to diagnose and treat liver tumors, in medical imaging (MRI, CT, SPECT), to treat joint inflammation associated with arthritis, gout, lupus

Erbium-166

Used in lasers and optics, in alloys to increase workability of metals, as a colorant for glass and jewelry
Sodium-24

Used to study blood flow and electrolyte uptake

Magnesium-24

Used to synthesize organic compounds, in flares, car bodies, electronics, sports equipment
Xenon-133

Used to assess pulmonary lung function as well as monitor blood flow in the brain

Cesium-133

Used in atomic clocks, solar cells, drilling fluids on oil rigs
**Phosphorus-32**

Used in DNA analysis, to locate cancer cells

**Sulfur-32**

Used to make sulfuric acid, fertilizer, pesticides, food preservatives; treat skin conditions; important part of many proteins
**Iodine-125**

Used to evaluate kidney function, diagnose deep vein thrombosis, analyze small amounts of hormones, treat prostate and brain cancer

**Tellurium-125**

Used in many alloys with iron, copper, lead; as a semiconductor and in solar cells; in ceramic pigments, fiber optic cables
Iodine-131

Used to diagnose liver, kidney, urinary tract problems; treat thyroid cancer

Xenon-131

Used in lamps, lasers, as an anesthetic
Carbon-11

Used in PET scans to evaluate brain function

Boron-11

Used in composites to make aerospace structures, sporting equipment, Pyrex and laboratory grade glassware, fiberglass, ceramics, semiconductors, magnets
Cobalt-60

Used in external beam radiation therapy to treat cancer, for medical tool sterilization

Nickel-60

Used to make magnets, steel, batteries, coinage