123I-FP-CIT (123I-ioflupane)

DATrace-123

An Effective Solution for The Diagnosis of Parkinsonian Syndromes

DATrace-123 is a solution for injection that contains the active substance 123I-ioflupane (123I-FP-CIT)

SPECT Dopamin Transporter Imaging Agent

SAMYOUNG UNITECH
Product Summary

Product Name
DATrace-123 Injection

Active Ingredient
N-(3-Fluoropropyl)-2β-carbomethoxy-3β-(4-[[123]I]iodophenyl)nortropane (123I-FP-CIT, 123I-ioflupane)

Action Mechanism
DATrace-123 is used as a radiopharmaceutical for the SPECT imaging of Dopamine Transporters (located at the end of Dopaminergic neurons) and, to a lesser extent, Serotonin Transporters due to its excellent ability to combine with both of these compounds.

Clinical Applications
The clinical applications of DATrace-123 using SPECT are as follows:
- Differential diagnosis of Parkinson’s Disease¹ with Nigrostriatal Dopaminergic Neuron damage and Essential Tremor
- Differential diagnosis of Parkinson’s Disease with Dopaminergic Neuron damage and Parkinson’s Disease² without other Dopaminergic Neuron damage
- Differential diagnosis of Dementia with Lewy bodies and Alzheimer’s Disease
- Early diagnosis and progression of Parkinson’s Disease and evaluation of therapeutic effects

Other Usage
DATrace-123 can be used for SPECT imaging studies of Dopamine and Serotonin Transporters in Degenerative Neuronal Diseases and other mental diseases.

¹ Parkinson ’s disease, Multiple System Atrophy, progressive supranuclear palsy, etc.
² Drug-induced, Psychogenic, Vascular, Toxin, Inflammatory, etc.
- DATrace-123 is supplied as a finished radiopharmaceutical (injection solution) that can be injected directly into patients without modifications.
- The recommended dose of DATrace-123 for human SPECT imaging is 111-185MBq (3-5mCi) injected directly into a vein.
- To prevent possible pain near the injection area, inject slowly over a period of 15 to 20 seconds into a vein in the upper arm.
- 3 to 6 hours after the DATrace-123 injection, a brain SPECT image can be acquired.
- Visually inspect striatum (Caudate nucleus and integument) intake dispersion of DATrace-123 using reconstructed brain tomography with attenuation correction. Alternatively, perform semi-quantitative inspection by calculating the intake ratio of specific and aspecific (generally referring to Occipital Lobe Cortex) binding of striatum.
- Take Lugol’s solution (comparable to iodide 100mg) once orally 30 to 60 minutes before injecting DATrace-123 or take 200-400mg of potassium perchlorate once orally so as to reduce thyroid intake of iodine. A small amount of radiation may be detected even if thyroid is blocked.

1. Anti-Parkinson’s disease drugs (L-DOPA, Dopamine agonist drug, MAO B antagonist drug, NMDA receptor blocker, Amantadine, COMT Antagonist drug) have no effect on the ability of DATrace-123 to combine with Dopamine Transporters. Therefore, drug administration is not required for DATrace-123 SPECT.
2. Cholinesterase antagonist drugs and anti-psychotics have no effect on the ability of DATrace-123 to combine with Dopamine Transporters.
3. SSRI may increase, to some extent, the ability of DATrace-123 to combine with Dopamine Transporters. However, there is no effect on visual imaging inspection.
4. Cocaine, Amphetamines and Methylphenidate decrease the ability of DATrace-123 to combine with Dopamine Transporters.

References

DATrace-123 Features

- DATrace-123 and Dopamine Transporter SPECTs which use DATrace-123 have been recognized for their effectiveness and stability by the Korea Food & Drug Administration and Center for New Health Technology Assessment.
- DATrace-123 is comparable to DaTscan™ (Dopamine Transporter SPECT Imaging Radiopharmaceutical) which is sold across Europe and the United States.
- The combination of DATrace-123 with Dopamine Transporter striatum forms a sustained equilibrium, resulting in superb Dopamine Transporter imaging accuracy.
- DATrace-123 is supplied as a finished radiopharmaceutical (injection solution) that can be injected directly into patients without modifications.
- DATrace-123 has a relatively long half-life (13.2 hours) allowing for extensive distribution even to remote hospitals. Furthermore, there is no restriction on the number of patients who can qualify for a one-day exam.
- Samyoung Unitech employs a wide range of logistics partners and methods which help ensure quick and reliable transportation to all of our customers.
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