

SYNOPSIS

Name of Sponsor/Company	Daiichi Sankyo Co., Ltd.
Name of Finished Product	SONAZOID® 16 µL vial for injection
Name of Active Ingredient	perflubutane
Title of Study	DD-723 Phase III Clinical Trial - Confirmatory Study in Subjects with Suspected Prostate Cancer -
Investigators	4 investigators
Study Centre(s)	4 centers
Publication (reference)	N.A.
Studied Period	8 months (October, 2010 - July, 2011)
Phase of Development	Phase III
Objectives	To confirm the superiority of detecting prostate cancer by contrast-enhanced ultrasonography (targeted biopsy: 4cores or less) plus systematic biopsy (standard 8 cores) over systematic biopsy (standard 8 cores + additional 4 cores) alone, and safety as well, using DD-723 in subjects with suspected prostate cancer.
Methodology	- Multicenter open-label study under central registration - Intra-individual comparison design
Number of Patients (planned and analyzed)	Planned: 120 subjects Treatment: 136 subjects Analyzed: 136 subjects
Diagnosis and Main Criteria for Inclusion	1) Subjects with suspected prostate cancer who are undergoing prostate biopsy 2) Subjects whose most recent PSA level is between 4.0 ng/mL and 20.0 ng/mL 3) Subjects aged equal or over 20 years old at the time of informed consent
Test Product, Dose and Mode of Administration, Batch Number	A single intravenous dose of 0.12 µL MB/kg administered via a forearm vein Lot number: DD723L0S10T01A
Duration of Treatment	Single injection
Reference Therapy, Dose and Mode of Administration, Batch	N.A.

Number	
Criteria for Evaluation	The primary endpoint was the detection rate of prostate cancer in the subjects.
Statistical Method	<p>The detection rate of prostate cancer in the subjects by contrast-enhanced ultrasonography (targeted biopsy: 4 cores or less) plus systematic biopsy (standard 8 cores) was compared with that by systematic biopsy (standard 8 cores and additional 4 cores) alone by McNemar test. The level as statistical significance was set at $p = 0.05$ (two-sided).</p> <p>Null hypothesis $H_0: p_2 - p_1 = 0$</p> <p>Alternative hypothesis $H_1: p_2 - p_1 \neq 0$</p> <p>p_1: The detection rate of prostate cancer by systematic biopsy alone</p> <p>p_2: The detection rate of prostate cancer by contrast-enhanced ultrasonography (targeted biopsy) plus systematic biopsy</p>
Summary - Conclusion	<p>The primary endpoint was assessed in the efficacy analysis set, which comprised 136 subjects. The average value of the biopsy core number of both groups were comparable, that were 11.6 cores by targeted biopsy + systematic biopsy (standard) and 11.9 cores by systematic biopsy (standard + additional). Patients who were detected prostate cancer in either biopsies were 71 of the 136 subjects.</p> <p>The subject-based detection rate were 47.8% (65/136 subjects, 95% CI: 39.4-56.2) by target biopsy + systematic biopsy (standard) and 45.6% (62/136 subjects, 95% CI: 37.2-54.0) by systematic biopsy (standard + additional), accordingly there was no significant difference in the detection rates (McNemar test: $p = 0.439$).</p> <p>No serious adverse events were reported, and all the adverse events were mild.</p>
Date of Report	Sep, 2014