AstraZeneca

DRUG PRODUCT	Naropin	**Synopsis**	(FOR NATIONAL AUTHORITY USE ONLY)
DRUG SUBSTANCE(S)	Ropivacaine	REFERRING TO PART	
DOCUMENT NO.	802-550-LC-0458-01	OF THE DOSSIER	
VERSION NO.	1		
STUDY CODE	SP-ROA-0021		
DATE	26 September, 2000		

A double-blind study comparing efficacy and tolerability of 7.5 mg/ml and 10 mg/ml ropivacaine for subarachnoid anaesthesia in patients undergoing total hip arthroplasty

STUDY CENTRE

This was a single center study.

PUBLICATION (REFERENCE)

Not applicable.

STUDY PERIOD

- **DATE OF FIRST PATIENT ENROLLED** March 1999
- **DATE OF LAST PATIENT COMPLETED** November 1999

PHASE OF DEVELOPMENT

Phase III (therapeutic use)

OBJECTIVES

The primary objective of this study was to investigate the efficacy (duration of sensory block at T10) of two concentrations of ropivacaine (7.5 mg/ml and 10 mg/ml) when used for spinal anaesthesia in patients undergoing primary unilateral total hip arthroplasty (cemented prosthesis). The secondary objective was to evaluate the tolerability (safety).

STUDY DESIGN

Double-blind, randomised, single center study. Patients received ropivacaine of 2.5 ml of either 7.5 mg/ml (18.75 mg) or 10 mg/ml (25 mg) for spinal anaesthesia for primary unilateral total hip arthroplasty surgery.

DIAGNOSIS AND MAIN CRITERIA FOR INCLUSION/EXCLUSION

Patients in the age 18-80 years scheduled for primary unilateral total hip arthroplasty performed under spinal anaesthesia were included. ASA risk category I, II or III. No known history of allergy, sensitivity or other form of reaction to local anaesthetics of amide type. Written informed consent was obtained.

TEST PRODUCT, BATCH NUMBER, DOSAGE AND MODE OF ADMINISTRATION

Ropivacaine 7.5 mg/ml [batch no. 472-64-8 (AA 132), expiry date 2002-01-17] or 10 mg/ml [batch no. 465-42-3 (AA 182), expiry date 2002 –01-17] in 20 ml ampoule. Single administration of 2.5 ml intrathecally.

COMPARATOR PRODUCT, BATCH NUMBER, DOSAGE AND MODE OF ADMINISTRATION

Not applicable

DURATION OF TREATMENT

Single injection.

MAIN VARIABLES:

- **EFFICACY**

- Duration of sensory block at dermatome T10
- Total duration of sensory block
- Time to onset of sensory block.
- Time to onset of motor block at Bromage degree 1, 2, 3.
- Duration of motor block at Bromage degree 1, 2, 3.
- Maximum upper and lower spread of sensory block.
- Motor block degree (Bromage 1, 2, 3).
- Quality of anaesthesia judged by the anaesthesiologist and surgeon
- Patient pain and discomfort during surgery.
- Time to first request of analgesia
- Total morphine consumption for the first 24 hours after injection of ropivacaine.

- **SAFETY**

- Pulse, diastolic and systolic blood pressure
- Experience during anaesthetic procedure
- Blood loss during surgery
- Adverse events

STATISTICAL METHODS

The data analysed were based on different populations of patients according to evaluability. These sets of patients are referred to as the per protocol (PP) and the intention to treat (ITT) data sets.

The statistical analysis for all variables consists of descriptive statistics and graphs. Wilcoxon (mid)rank sum test and survival analysis, e.g. the log rank test were used for pairwise comparisons between the three groups. A p-value less than 0.05 was considered to show statistical significance.

PATIENTS

	Ropi 7.5 mg/ml	**Ropi 10 mg/ml**	**Total**
No. planned (PP)	50	50	100
No. randomised	53	57	110
No. analysed for safety	51	54	105
No. analysed for efficacy (ITT)	51	53	104
Males/Females (ITT)	25/26	26/27	51/53
Mean age (range) (ITT)	64 (41-80)	67 (43-80)	65 (41-80)
No. completed (PP)	48	53	101

SUMMARY

- EFFICACY RESULTS

When given equal volumes (2.5 ml) for intrathecal anesthesia, ropivacaine 10 mg/ml showed a statistically significantly longer duration of sensory block at dermatome T10 compared with ropivacaine 7.5 mg/ml. Onset was rapid and equal for motor and sensory block in both groups. Maximum upper and lower spread of sensory block as well as time to first request of analgesics were similar between groups. Ropivacaine 10 mg/ml provided excellent muscle relaxation in 98% of the patients and the corresponding figure for ropivacaine 7.5 mg/ml was 88%. In all patients, except two in the ropivacaine 7.5 mg/ml group, the anesthetic conditions were excellent.

- SAFETY RESULTS

The development of vital signs seen in this study reflects the expected physiological effects from intrathecal anesthesia. The most commonly reported adverse events, fever, nausea, hypotension and vomiting, are frequently seen in connection to major surgery. However, safety data from this study do not suggest any significant or new findings or changes in the already known safety profile of the drug.