

# USEFULNESS OF SERUM SCLEROSTIN AS A DIAGNOSTIC MARKER OF OSTEOPOROSIS IN A COHORT OF SPANISH POSTMENOPAUSAL WOMEN

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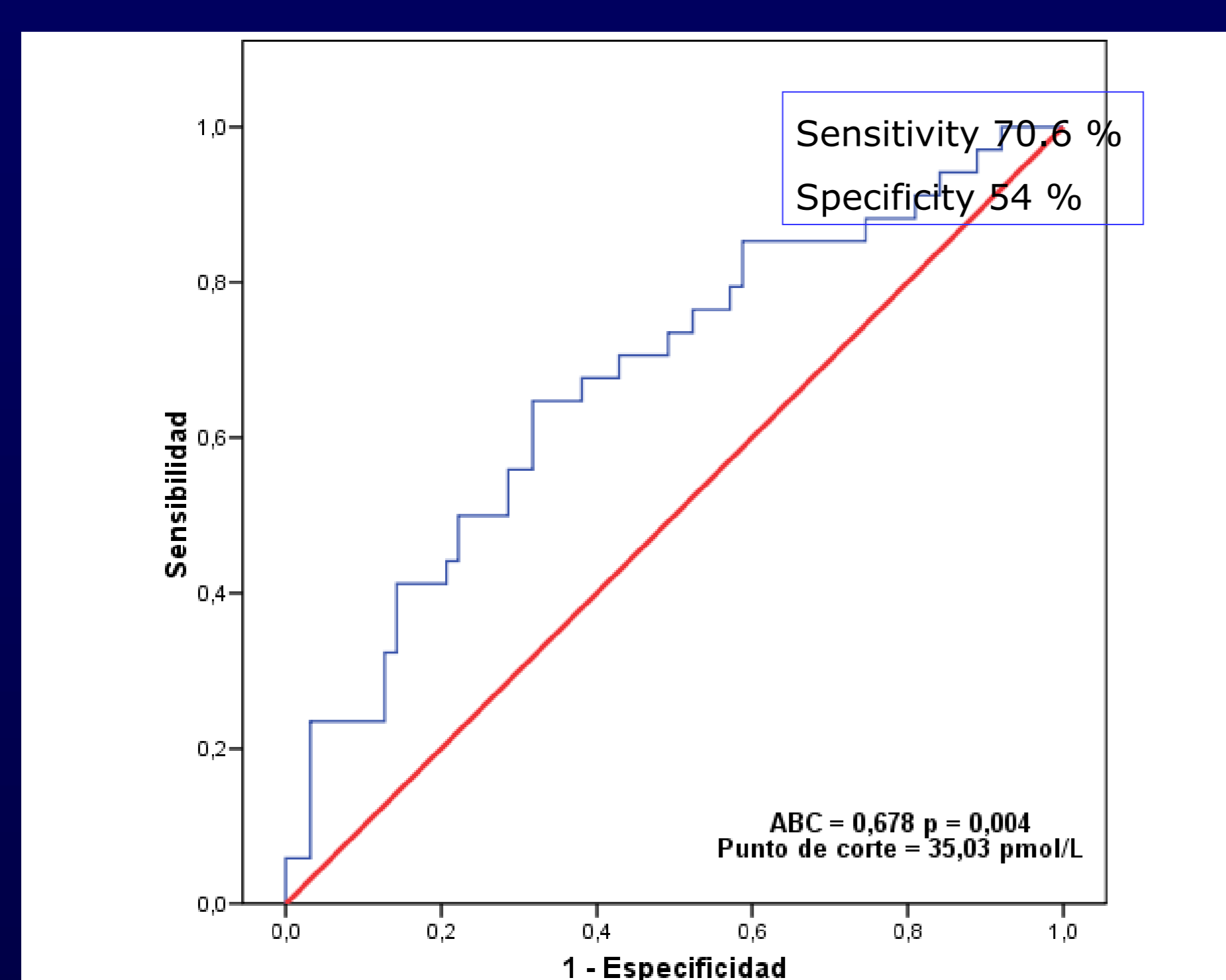
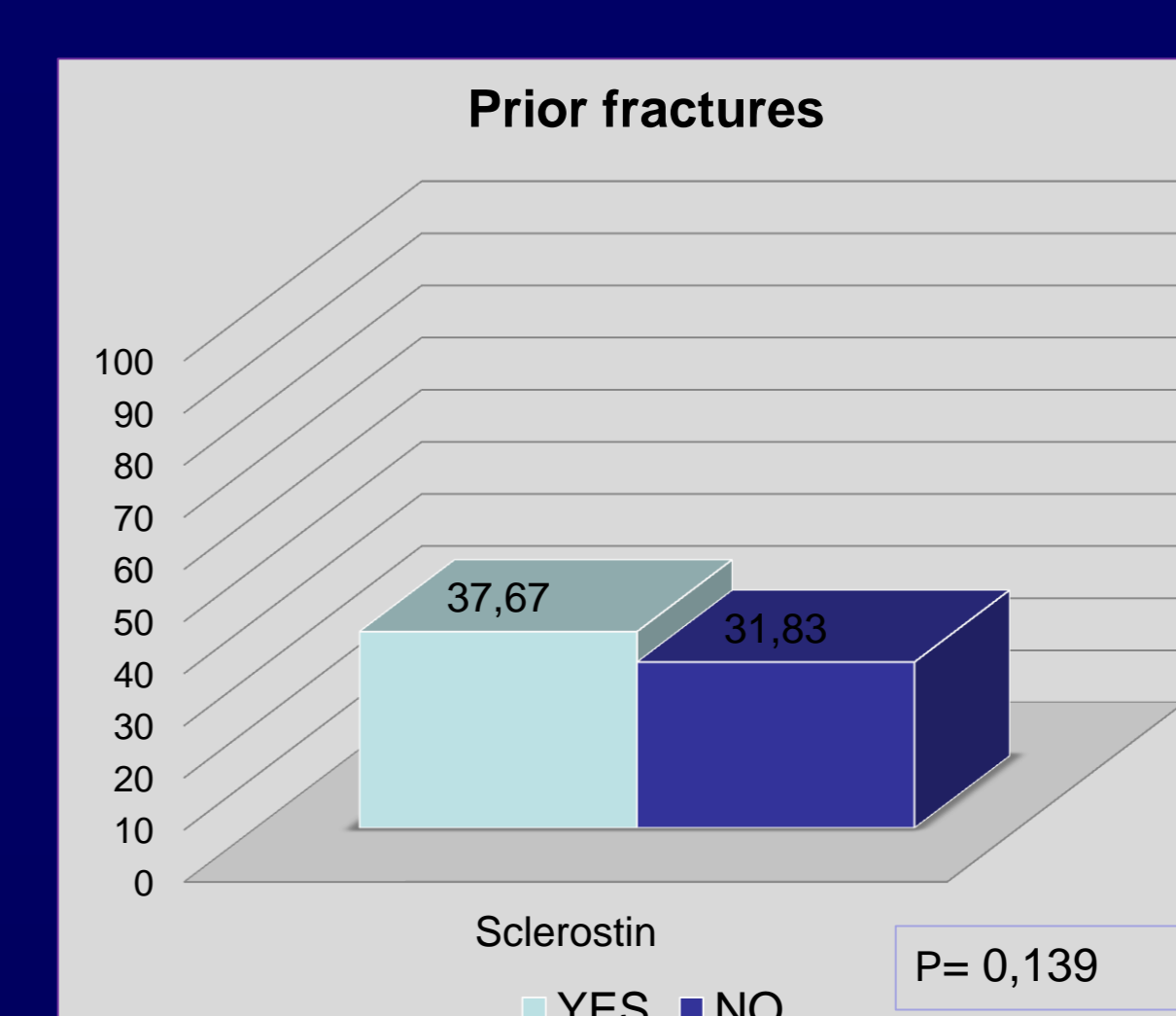
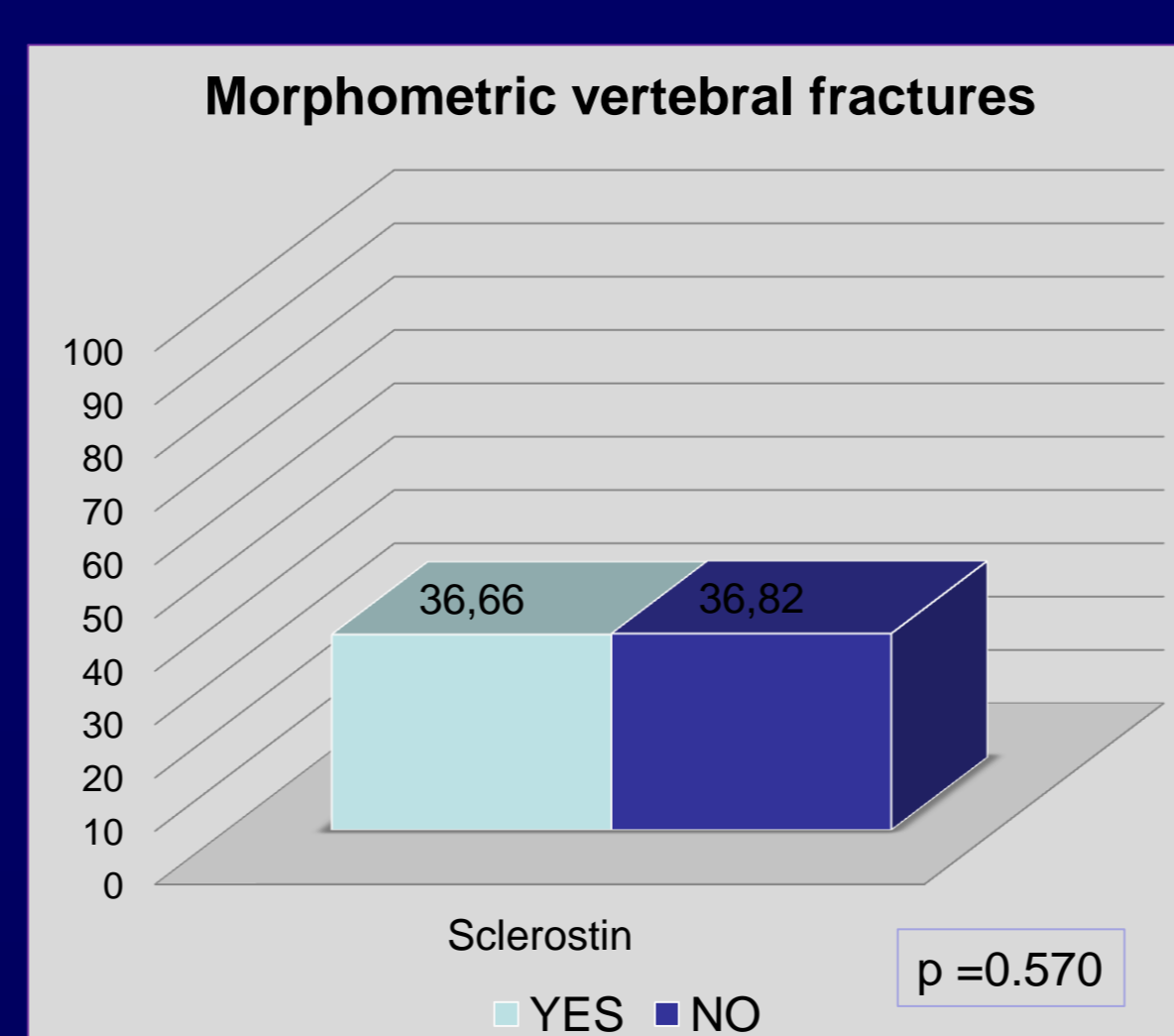
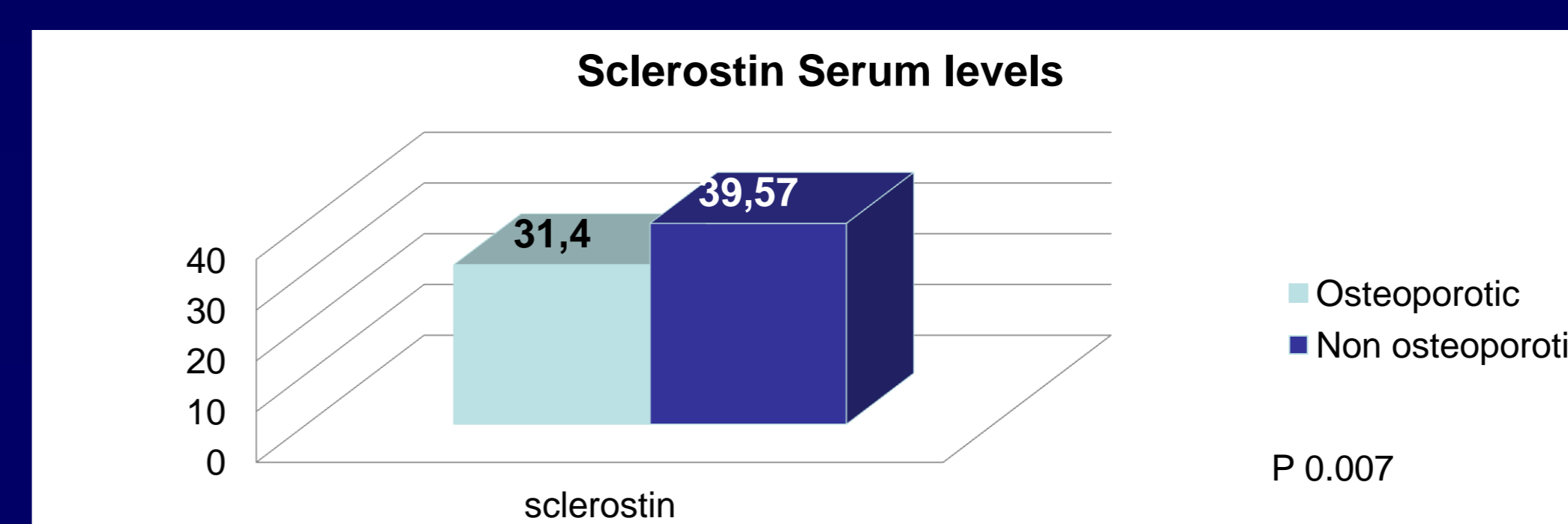
**INTRODUCTION:** Sclerostin, produced by osteocytes, is a potent inhibitor of Wnt signaling and bone formation. The usefulness of its determination in clinical practice is not well established.

**OBJECTIVES:** The aims of this study were to evaluate serum sclerostin levels in a cohort of Spanish postmenopausal women, and to analyze its relationship with bone metabolism.

**METHODS:** We measured serum sclerostin in 97 postmenopausal women using enzyme-linked-immunosorbent assays (ELISA). We also evaluated calciotropic hormones, bone turnover markers, bone mineral density (BMD), morphometric vertebral fractures, and prevalent fractures.

## RESULTS:

	Mean	SD	Range
Age (years)	65,72	9,19	41-83
Menopause (years)	14,67	10,23	1-43
Creatinine (mg/dl)	0,80	0,18	0,5-1,5
Calcium (mg/dl)	9,48	0,42	8,7-10,6
Phosphorus (mg/dl)	3,66	0,46	2,7-5,05
Sclerostin (pmol/l)	36,70	14,40	14,9-104,9
CTX (ng/ml)	0,438	0,22	0,089-1,150
Osteocalcin	11,21	35,42	0,20-344
BAP (ug/ml)	17,92	13,40	6,4-113
TRAP5β (U/l)	2,40	1,64	0,1-8,7
25OH vitamin D (mg/dl)	19,15	12,92	1,6-72,2
iPTH (pg/ml)	52,15	20,94	19,9-117



	Pearson correlation	Sig.(bilateral)
CTX	-0.011	0.917
BAP	-0.093	0.374
Osteocalcin	-0.055	0.598
TRAP5β	0.238	0.215
iPTH	-0.069	0.507
25OHvitamin D	0.107	0.299
BMD Lumbar spine	0.156	0.128
T-score Lumbar spine	0.150	0.141
BMD Total hip	0.146	0.153
T-score total hip	0.162	0.113
BMD femoral neck	0.104	0.312
T-score femoral neck	0.024	0.128

## CONCLUSION:

Circulating sclerostin levels were decreased in Spanish women with postmenopausal osteoporosis but serum sclerostin had limited usefulness as a diagnostic marker of osteoporosis.