

calculated the incident rate of all fractures. After dividing the patients according to the use of GCs, we compared baseline characteristics and fracture-free survival between two groups. We compared accuracies of TBS, BMD, clinical risk factors for fracture and their combinations for predicting new fractures using areas under the receiver operator characteristic (ROC) curve (AUC).

**Results:** A total of 14 fractures in 12 patients were occurred among 100 patients during follow-up (428.8 person-years): 9 among the 44 in GC users and 5 in 56 GC non-users. Incidence of fracture was not different between two groups (log-rank test,  $p=0.27$ ). AUC for incident fracture prediction of TBS alone [AUC 0.54, 95% confidence interval (CI) 0.35–0.72] was comparable with TBS combined with L-spine BMD (AUC 0.54, 95% CI 0.36–0.71) or with hip BMD (AUC 0.55, 95% CI 0.37–0.73). Accuracy for prediction of new fracture is increased when TBS was combined with age and history of previous fracture (AUC 0.74, 95% CI 0.62–0.85). In GC users, history of previous fracture alone (AUC 0.79, 95% CI 0.62–0.97) showed the best accuracy for predicting new fracture among TBS, BMD, clinical risk factors for fracture and their combinations.

**Conclusions:** TBS combined with age and previous history of fracture showed the highest accuracy for predicting new fracture compared to TBS or BMD alone or their combinations in RA patients. In GC users, history of previous fracture alone showed the highest accuracy for predicting new fracture.

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### AB1122 ALL-CAUSE OF HOSPITAL MORTALITY IN PATIENTS WITH RHEUMATOID ARTHRITIS AND LUPUS ERYTHEMATOSUS IN A UNIVERSITY HOSPITAL DURING 1998 TO 2014

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**Background:** All-cause and cause-specific mortality is increased in patients with systemic lupus erythematosus (SLE) and Rheumatoid Arthritis (RA) when compared to the general population. Mortality can be attributed to the disease per se, side effects of drugs and effect of comorbidities. The survival of patients has improved over the past years when compared to historical controls

**Objectives:** The objective is to describe all-cause of mortality in patients with SLE and RA in a university hospital.

**Methods:** This is an observational, descriptive, and cross-sectional study. We included all patients with SLE and RA hospitalized during 1998 to 2014. The cause of death was obtained from medical records and classified according to International Classification of Diseases (ICD)-10. We made a descriptive analysis of all-cause of mortality of both diseases.

**Results:** We analyzed 1,330 medical records, of which 215 died in hospital. The respiratory insufficiency was the most common mortality diagnosis in both diseases (RA 29%, SLE 24.1%), followed by sepsis (RA 25%, SLE 20.4%). The all-cause of mortality of SLE and RA are shown in Table 1. Of the 467 RA hospital admissions, the 5.1% died, and of the 863 SLE hospital admissions, the 22.1% died.

Table 1. Mortality of RA and SLE

Year	RA		SLE	
	Hospital admissions, n=467	Deaths, n=24	Hospital admissions, n=863	Deaths, n=191
1998–99	18 (3.9)	3 (25)	57 (6.6)	12 (47.4)
2000	22 (4.7)	0 (0)	21 (2.4)	4 (19)
2001	14 (3)	0 (0)	36 (4.2)	5 (13.9)
2002	17 (3.6)	0 (0)	22 (2.5)	2 (9.1)
2003	26 (5.6)	0 (0)	65 (7.5)	22 (33.8)
2004	33 (7.1)	1 (3.03)	40 (4.6)	9 (22.5)
2005	28 (6)	1 (3.57)	64 (7.4)	32 (50)
2006	27 (5.8)	0 (0)	39 (4.5)	7 (17.9)
2007	34 (7.3)	0 (0)	33 (3.8)	9 (27.3)
2008	40 (8.6)	2 (5)	49 (5.6)	19 (38.8)
2009	28 (6)	0 (0)	53 (6.1)	8 (15.1)
2010	24 (5.1)	7 (29.17)	60 (7)	10 (16.7)
2011	27 (5.8)	0 (0)	51 (5.9)	9 (17.6)
2012	31 (6.6)	2 (6.45)	80 (9.3)	9 (11.3)
2013	41 (8.8)	6 (14.63)	88 (10.2)	15 (17)
2014	40 (8.6)	2 (5)	66 (7.6)	16 (24.2)
2015	17 (3.6)	0 (0)	39 (4.5)	3 (7.7)

RA: Rheumatoid arthritis, SLE: Systemic Lupus Erythematosus.

**Conclusions:** Advances in the diagnosis and treatment of SLE and RA, have decreased the morbidity and mortality of the two diseases. Infectious and cardiovascular pathologies were the most frequent causes of death.

**Disclosure of Interest:** None declared

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### AB1123 POOR ASSESSMENT OF RISK OF OSTEOPOROSIS AFTER A FOREARM FRACTURE IN WOMEN: A HEALTH INSURANCE DATABASE STUDY IN THE LOIRE VALLEY REGION (FRANCE)

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**Background:** Bone Mineral density (BMD) assessment is a useful tool to evaluate bone fragility and is largely recommended in patients at risk of osteoporosis. We have previously reported in 250 women aged 50 year-old or more that only ~10% of them had a BMD after a forearm fracture (1).

**Objectives:** Herein, we evaluated BMD assessment and prescription of anti-osteoporotic drugs after a forearm fracture in women after 50 year-old in a large population database.

**Methods:** We identified all forearm fractures in women aged 50 years old or more in the "Centre-Val de Loire, France" area between 01/01/2011 and 31/12/2012, using the National Health Insurance database which cover both private and public sectors of the whole population. We analyzed the reimbursement and determinants of BMD assessment such as age, consumption of drugs inducing osteoporosis, anti-osteoporotics drugs and long term illnesses.

**Results:** We identified 4120 women with a forearm fracture during the study period. Among them, 546 (13.25%) had a BMD assessment performed at a median time of 4 months after the fracture. Women who had had a BMD were significantly younger than those who had not (67.44 years versus 74.63 years: OR=0.941 CI95% (0.932–0.949)). Anti-aromatase treatment was positively associated with BMD assessment (OR=3.233 (CI95%: 1.976–5.290)) while corticosteroid were not (OR=0.866 (CI95%: 0.601–1.247)). Among the women who had a BMD assessment, 168/546 (30.77%) had an anti-osteoporotic drug initiated after the forearm fracture, versus 231/3574 (6.46%) in those who had no BMD performed ( $p<0.05$ ).

**Conclusions:** In this large population, less than 15 percent of women over 50 year-old have a BMD assessment after a forearm fracture. BMD assessment was associated with anti-osteoporotic drugs initiation.

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### AB1124 EFFECT OF SARCOPENIA, SUBCUTANEOUS ADIPOSE TISSUE AND ABDOMINAL VISCERAL FAT ON MORTALITY RISK OF COMMUNITY-DWELLING OLDER ADULTS: A POPULATION-BASED PROSPECTIVE COHORT STUDY IN BRAZIL

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**Background:** Body composition changes resulting from ageing (decreased muscle mass and increased fat tissue) are frequently not accompanied by concomitant changes in body mass index (BMI). Thus, BMI has low accuracy to estimate death risk attributed to changes in body composition in the older adults<sup>1</sup>. Currently, the best method for body composition analysis in routine clinical practice is dual energy X-ray absorptiometry (DXA)<sup>2</sup>. However, the few studies on body composition by DXA and mortality risk in elderly have some limitations, such as analysis not compartmentalized (subcutaneous and visceral tissues) of body fat and appendicular muscle mass not adjusted for fat mass<sup>3</sup>.

**Objectives:** We sought to investigate the association between body composition by DXA (including visceral fat measurement) and mortality in a longitudinal, prospective, population-based cohort of elderly subjects.

**Methods:** 839 community-dwelling subjects (516 women, 323 men), ≥65 years, were assessed by questionnaire on clinical data, laboratory exams and body composition by DXA using Hologic QDR 4500A equipment. DXA APEX software computes visceral adipose tissue (VAT) by subtracting the subcutaneous adipose tissue (SAT) from the total android fat. All analyses were performed at baseline. Total body fat was expressed by fat mass index (FMI) [(total body fat (kg)/height<sup>2</sup> (m)]. Sarcopenia was defined as low appendicular muscle mass adjusted for fat. Mortality was recorded during 4 year-follow-up. Multivariate logistic regression was used to compute odds ratios for all-cause and cardiovascular mortality.