**ORAL SESSION**

**LATE-BREAKERS:**

**SESSION 3**

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**ESH-ENDORSED EUROPEAN/INTERNATIONAL FIBROMUSCULAR DYSPLASIA REGISTRY: RESULTS OF THE FIRST 609 PATIENTS**

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**Objective:** The pioneering works of French and United States research teams have changed our conception of Fibromuscular Dysplasia (FMD) from a rare cause of renal artery stenosis in young women to a more frequent, often systemic vascular disease, which can be diagnosed at all ages, both in men and women. We report here the main characteristics of the first 609 patients enrolled in the European/International FMD registry endorsed by the ESH.

**Design and method:** The current analysis was performed in 609 patients enrolled from November 2015 to January 2018 in 30 centres from 17 countries also including 3 extra-European countries (Argentina, Japan and Tunisia).

**Results:** Enrolled patients were predominantly women (83%) and Caucasians (88%). Age at diagnosis was 45.8 ± 15.8 years, 74% of patients were hypertensive, 72% had a multifocal FMD and 31% multivessel FMD. Family history of FMD was reported in 2.7% of cases. Compared to patients with multifocal FMD, patients with focal FMD were more often male (26% vs. 13%, p = 0.0002), had less often multivessel FMD (12% vs. 39%, p = 0.0001) and more often a need for revascularization interventions (70% vs. 50%, p = 0.01). Compared to patients with single-vessel FMD, patients with multivessel FMD were older (49.5 ± 14.2 vs. 44.1 ± 16.1 years, p = 0.03), had lower eGFR (84.2 ± 28.1 vs. 94.4 ± 40.6 mL/min, p = 0.0005) and were more frequently of the multifocal subtype (89% vs. 64%, p = 0.00001). Notably, the proportion of arterial dissections was higher in men than in women (12% vs. 2%, p = 0.01).

**Conclusions:** The main findings of the European/International FMD registry are in line with those of the French-Belgian ARCADIA study and the United States registry, with the exception of a lower proportion of multivessel FMD, which probably reflects a lack of systematic vascular exploration in some centres. In the near future, the European/International FMD registry will make possible further comparisons between old and young, incident and prevalent patients, and/or patients from different ethnicities or regions of the world. Accumulation of follow-up data may also provide insights on predictive factors of progression/complication.