Cardiac Resynchronisation Therapy (CRT) Survey II: CRT implantation in Europe and in Switzerland

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AIM
Between October 2015 and December 2016, 11,088 patients from 42 countries having cardiac resynchronisation therapy (CRT) devices implanted were included in the CRT II Survey. We compared the characteristics of Swiss CRT recipients with the overall European population.

METHODS
Demographic and procedural data from seven Swiss centres recruiting all consecutive patients undergoing either de-novo CRT implantation or an upgrade to a CRT system were collected and compared with the European population.

RESULTS
A total of 320 Swiss patients (24.4% female, mean age 71.0 ± 10.2 years, 47% ischaemic cardiomyopathy) were enrolled, which amounts to 38% of all CRT implantations in Switzerland during this period. Of the patients enrolled, 38% had atrial fibrillation, 27% second- or third-degree atrioventricular block, and 68% complete left bundle-branch block. Swiss patients had significantly less often the classical indication of heart failure with a wide QRS complex (40 vs 61%; odds ratio [OR] 0.44, 95% confidence interval [CI] 0.35-0.55; p <0.001). Compared with the European population, Swiss patients were significantly older (71 vs 68.5 years, p <0.001), less symptomatic from heart failure and had more chronic kidney disease. Swiss patients significantly more often received a CRT-pacemaker (37 vs 30%; OR 1.37; 95% CI 1.09-1.73; p = 0.007) and quadripolar left ventricular leads (69 vs 57%; OR 1.67, 95% CI 1.32-2.13; p <0.001).

CONCLUSION
Compared with European CRT recipients, Swiss CRT patients are older, less symptomatic and suffer more often from comorbidities. Although two thirds of the implantations were CRT-defibrillator systems, Swiss patients more often received CRT-pacemaker systems than their European counterparts.