Supplementary File 2. Overview of key MitraClip™ studies

RANDOMIZED CONTROLLED TRIALS (RCTs)	
EVEREST II (completed)	• 279 patients with significant (≥3+) MR (PMR or SMR) who were suitable candidates for surgery • MitraClip™ versus conventional surgery • USA and Canada • Enrolment: 2005–2008
COAPT (completed)	• 614 HF patients with SMR (≥3+) unsuitable for mitral valve surgery • MitraClip™ + GDMT versus GDMT alone • 78 sites in USA • Enrolment: 2012–2017 (follow-up ongoing)
MITRA-FR (completed)	• 304 patients with severe SMR • MitraClip™ + GDMT versus GDMT alone • 37 sites in France • Enrolment: 2013–2017
RESHAPE-HF2 (ongoing)	• 650 patients (including 40 from RESHAPE-HF) with SMR • MitraClip™ + GDMT +/-CRT versus GDMT +/–CRT alone • CZ, DE, DK, ES, GR, IT, PL, PT, UK • 2015–ongoing
MATTERHORN (ongoing)	• 210 patients with PMR or SMR with left ventricle dysfunction • MitraClip™ versus surgery • Germany, Switzerland • 2015–ongoing
MITRA-HR (ongoing)	• 330 patients with severe PMR • MitraClip™ versus conventional surgery • France • 2018–ongoing
REPAIR MR (ongoing)	• ~500 moderate-surgical-risk patients with severe PMR candidates for open heart surgery. • MitraClip™ versus open heart mitral surgical repair. • 60 sites in the USA, Canada, and Europe • Enrolment: 2020–ongoing
REGISTRIES	
EVEREST II HRS (completed)	• Prospective, multicentre study which assessed the efficacy and safety of MitraClip™ in 78 patients with significant (≥3+) MR (PMR or SMR) deemed high risk surgical candidates. • USA • 2007–2008
ACCESS-EU (completed)	• Two-phase, prospective, observational study of 567 patients with PMR or SMR who received MitraClip™ • 14 sites in CH, DE, DK, IT • 2008–2011
EVEREST II REALISM (completed)	• Prospective, continued-access study to investigate the real-world use of MitraClip™ in low versus high surgical risk patients (N=965) with PMR or SMR • USA • 2009–2011

GRASP (completed)	• Enrolled 117 patients with grade ≥3+ MR (PMR or SMR) deemed high risk for conventional surgery who received MitraClip™ • Single centre in Italy. • 2008–2012
MULTI-CENTRE EXPERIENCE (completed)	• Registry enrolling 173 patients with PMR or SMR treated with MitraClip™ • Three centres in Denmark, Sweden, and UK • 2009–2012
FRENCH REGISTRY (completed)	• A study of short- and mid-term efficacy and safety of MitraClip™ in inoperable/high surgical risk patients (N=62) with PMR or SMR • Seven centres in France • 2010–2012
EUROPEAN SENTINEL (completed)	• A real-world overview of 628 patients with PMR or SMR who received MitraClip™ • BE, CH, DE, DK, IT, PL, SE, UK • 2011–2012
TRAMI (completed)	• A study of MitraClip™ efficacy and safety in daily clinical practice based on 1,064 patients with PMR or SMR and cardiac comorbidities • 21 sites in Germany • 2010–2013
EXPAND (completed)	• A contemporary, prospective study evaluating real-world experience of performance and safety of MitraClip™ (NTR, XTR) in 1,000 patients with PMR, SMR, or mixed MR • CH, DE, ES, IL, IT, NL, UK, and USA • 2018–2019
TVT (ongoing)	• Registry enrolling all patients (including those with PMR or SMR; N=12,334 as of September 2017) that have undergone transcatheter valve replacement and repair procedures for the monitoring of safety and real-world outcomes • Multiple centres throughout the US • 2011–ongoing
MITRA SWISS (ongoing)	• Prospective, nationwide investigator initiated MitraClip™ registry that continuously enrols patients with either PMR or SMR undergoing MitraClip™ procedure (N=1,212 as of August 2019) • 2011–ongoing
GIOTTO (ongoing)	• Prospective, observational patient registry which will enrol up to 1,500 MitraClip™ patients with PMR or SMR for follow-up to 5 years • Italy • 2016–ongoing
EXPAND G4 (ongoing)	• Prospective patient registry to assess the safety and performance of the fourth generation MitraClip™ device in 100 MitraClip™ G4 recipients with either PMR, SMR, or mixed MR • 17 sites in the US • 2020–ongoing