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**Title:** Dedicated severe asthma services improve healthcare utilisation and quality of life

Dr. David 319 Gibeon david.gibeon07@imperial.ac.uk MD <sup>1</sup>, RN. Suzanne 320 Regan S.Regan@rbht.nhs.uk <sup>2</sup>, Prof. Dr Christopher 9399 Brightling ceb17@leicester.ac.uk MD <sup>4</sup>, Dr. Rob 9402 Niven Robert.Niven@uhsm.nhs.uk MD <sup>6</sup>, Dr. Adel 9403 Mansur adel.mansur@heartofengland.nhs.uk MD <sup>7</sup>, Dr. Rekha 9410 Chaudhuri rekhachaudhuri@yahoo.com MD <sup>9</sup>, Dr. Christine 9405 Bucknall Christine.bucknall@ggc.scot.nhs.uk MD <sup>8</sup>, Prof. Dr Neil 9357 Thomson neil.thomson@glasgow.ac.uk MD <sup>3</sup>, Prof. Dr Kian Fan 323 Chung F.chung@imperial.ac.uk MD <sup>1</sup>, Prof. Dr Liam 9400 Heaney l.heaney@qub.ac.uk MD <sup>5</sup> and Dr. Andrew 324 Menzies-Gow A.Menzies-Gow@rbht.nhs.uk MD <sup>2</sup>. <sup>1</sup> Airways Division, Imperial College London, London, United Kingdom ; <sup>2</sup> Adult Asthma, Royal Brompton Hospital, London, United Kingdom ; <sup>3</sup> Institute of Infection, Immunity and Inflammation, University of Glasgow, Glasgow, United Kingdom ; <sup>4</sup> Respiratory Medicine, University of Leicester, Leicester, United Kingdom ; <sup>5</sup> Centre for Infection and Immunity, Queen's University of Belfast, Belfast, United Kingdom ; <sup>6</sup> Institute of Inflammation and Repair, The University of Manchester and University Hospital of South Manchester, Manchester, United Kingdom ; <sup>7</sup> Severe and Brittle Asthma Unit, Birmingham Heartlands Hospital, Birmingham, United Kingdom ; <sup>8</sup> Department of Respiratory Medicine, Glasgow Royal Infirmary, Glasgow, United Kingdom and <sup>9</sup> Department of Respiratory Medicine, Gartnavel General Hospital, Glasgow, United Kingdom .

**Body:** Introduction: 5% of asthmatics have severe disease. This group have a high morbidity and represent a significant unmet clinical need. Patients referred with difficult asthma to centres within the BTS severe asthma registry undergo a Systematic Assessment of Severe Asthma (SAA), comprising a set of coordinated investigations accompanying a detailed history and examination. Methods: 493 patients, collected as part of the National Registry for dedicated UK Difficult Asthma Services, underwent a SAA. Lung function, healthcare utilisation, medication burden and QoL at baseline were compared with outcomes after one year. Results: 397 (81%) patients were diagnosed with severe asthma. 56% of patients had a significant comorbidity. At follow-up (median 286-days [248–376]) more patients were receiving anti-IgE-therapy or steroid-sparing agents. There were significant reductions in healthcare utilisation and improved QoL.

Table 1:

	Baseline	Follow-up	p-value
ACQ (IQR)	3.4 (2.5-4.1)	2.8 (1.9-4.0)	0.0001

Juniper-AQLQ total-score (IQR)	3.0 (2.5-3.9)	3.7 (2.8-5.1)	0.0001
≥1 GP/AE visits past year (%)	201 (88)	152 (66)	0.0001
≥1 hosp admissions past year (%)	131 (48)	90 (33)	0.0005
≥1 oral steroid course past year (%)	217 (91)	185 (77)	0.0001
Steroid courses past year (IQR)	6 (3-8)	3 (1-5)	0.0001
On maintenance oral steroid (%)	119 (41)	123 (43)	ns
Oral steroid dose (IQR)	15 (10-20)	10 (8-20)	0.003
Anti-IgE-therapy (%)	13 (5)	39 (14)	0.0002
Steroid-sparing agent (%)	10 (4)	27 (10)	0.006

Conclusion: Entry into dedicated severe asthma services provides a structured and thorough assessment, which identifies alternative/additional diagnoses, leading to targeted interventions, improved care and reduced healthcare utilisation and improved QoL.