

Table 1

	No additional investigations (n=542)	Additional investigations (n=264)	p Value
Age (IQR)	54 (47–63)	61 (54–67)	<0.001
Gender (male) (%)	306 (57)	148 (56)	0.777
Diabetes, n (%)	49 (9)	44 (17)	0.001
Smoking, n (%)	249 (46)	131 (50)	0.290
Family history of IHD, n (%)	286 (53)	154 (58)	0.136
Hypertension, n (%)	176 (33)	117 (44)	0.001
Low clinical risk, n (%)	242 (45)	49 (19)	
Intermediate clinical risk, n (%)	179 (33)	86 (31)	<0.001
High clinical risk, n (%)	106 (20)	112 (43)	

However, the exercise ECG is still relied upon in many chest pain clinics, largely due to its widespread availability and relatively low cost. Additional tests are still required in some patients to reach a diagnosis and we therefore aimed to identify patients in whom initial exercise testing is unhelpful and where an adherence to NICE guidelines may improve patient care.

**Methods** We retrospectively collected data for 1000 consecutive patients presenting to the rapid access chest pain clinic. Differences in clinical characteristics between patients who did and did not require additional investigations following initial exercise testing were analysed and the clinical risk of each patient was estimated using the published NICE guidelines table. Clinical risk was defined as low (10–29%), intermediate (30–60%) and high (61–90%). A binary logistic regression model was used to determine predictors of those requiring additional testing.

**Results** The baseline clinical characteristics are shown in table 1.

Following clinical history and examination, 806 out of 1000 patients attending the clinic underwent exercise testing. 542 (67%) of patient did not require any further investigations, however 264 (33%) needed additional tests which included myocardial perfusion imaging, stress echocardiography, stress MRI and coronary angiography. In univariate analysis comparing both groups, patients requiring further tests were more likely to be older, diabetic, hypertensive and with high clinical risk. Patients not requiring additional tests were more likely to have low clinical risk. In a binary logistic regression model, only clinical risk remained a predictor of needing further investigations ( $p=0.001$ ).

**Conclusions** The majority of patients attending the rapid access clinic for stable chest pain undergo exercise testing, with one third also requiring additional investigations. Patients with high clinical risk appear to benefit least from the initial exercise test in terms of reaching a diagnosis and proceeding directly to alternative investigations may be more appropriate.