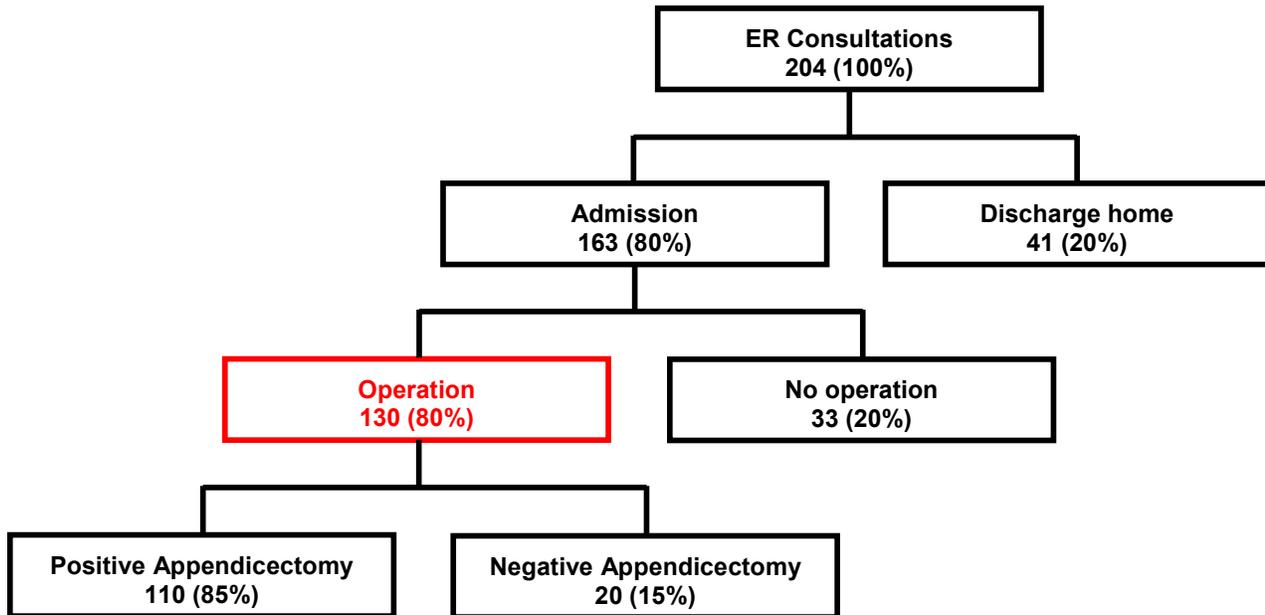


Additional file 1: Sample Size Calculation Flow Chart



Test:	t tests - Means: Difference between two independent means (two groups)														
Analysis:	A priori: Compute required sample size														
Input:	<table> <tr> <td>Tail(s)</td> <td>= Two</td> </tr> <tr> <td>Effect size d</td> <td>= 0.7905694</td> </tr> <tr> <td>α err prob</td> <td>= 0.05</td> </tr> <tr> <td>Power (1-β err prob)</td> <td>= 0.90</td> </tr> <tr> <td>Allocation ratio N2/N1</td> <td>= 0.185</td> </tr> </table>	Tail(s)	= Two	Effect size d	= 0.7905694	α err prob	= 0.05	Power (1- β err prob)	= 0.90	Allocation ratio N2/N1	= 0.185				
Tail(s)	= Two														
Effect size d	= 0.7905694														
α err prob	= 0.05														
Power (1- β err prob)	= 0.90														
Allocation ratio N2/N1	= 0.185														
Output:	<table> <tr> <td>Noncentrality parameter δ</td> <td>= 3.2522181</td> </tr> <tr> <td>Critical t</td> <td>= 1.9786708</td> </tr> <tr> <td>Df</td> <td>= 128</td> </tr> <tr> <td>Sample size group 1</td> <td>= 110</td> </tr> <tr> <td>Sample size group 2</td> <td>= 20</td> </tr> <tr> <td>Total sample size</td> <td>= 130</td> </tr> <tr> <td>Actual power</td> <td>= 0.8975579</td> </tr> </table>	Noncentrality parameter δ	= 3.2522181	Critical t	= 1.9786708	Df	= 128	Sample size group 1	= 110	Sample size group 2	= 20	Total sample size	= 130	Actual power	= 0.8975579
Noncentrality parameter δ	= 3.2522181														
Critical t	= 1.9786708														
Df	= 128														
Sample size group 1	= 110														
Sample size group 2	= 20														
Total sample size	= 130														
Actual power	= 0.8975579														

Oversampling – 20%: lost to follow up patients, missing data/blood samples

Total number of patients attending A&E: 245

Interim analysis will be performed once 123 patients are recruited. A power analysis will be performed and the sample size re-calculated based on the actual and precise data collected. At interim analysis, the external data monitoring committee will decide upon the continuation or discontinuation of the trial, as well the potential need to modify the sample size. If any changes are suggested by the external data monitoring committee, the principal investigators will decide on the feasibility of the potential changes and submit a formal addendum to the ethics committee. No changes will be made to the protocol or study design unless first approved by the ethics committee.