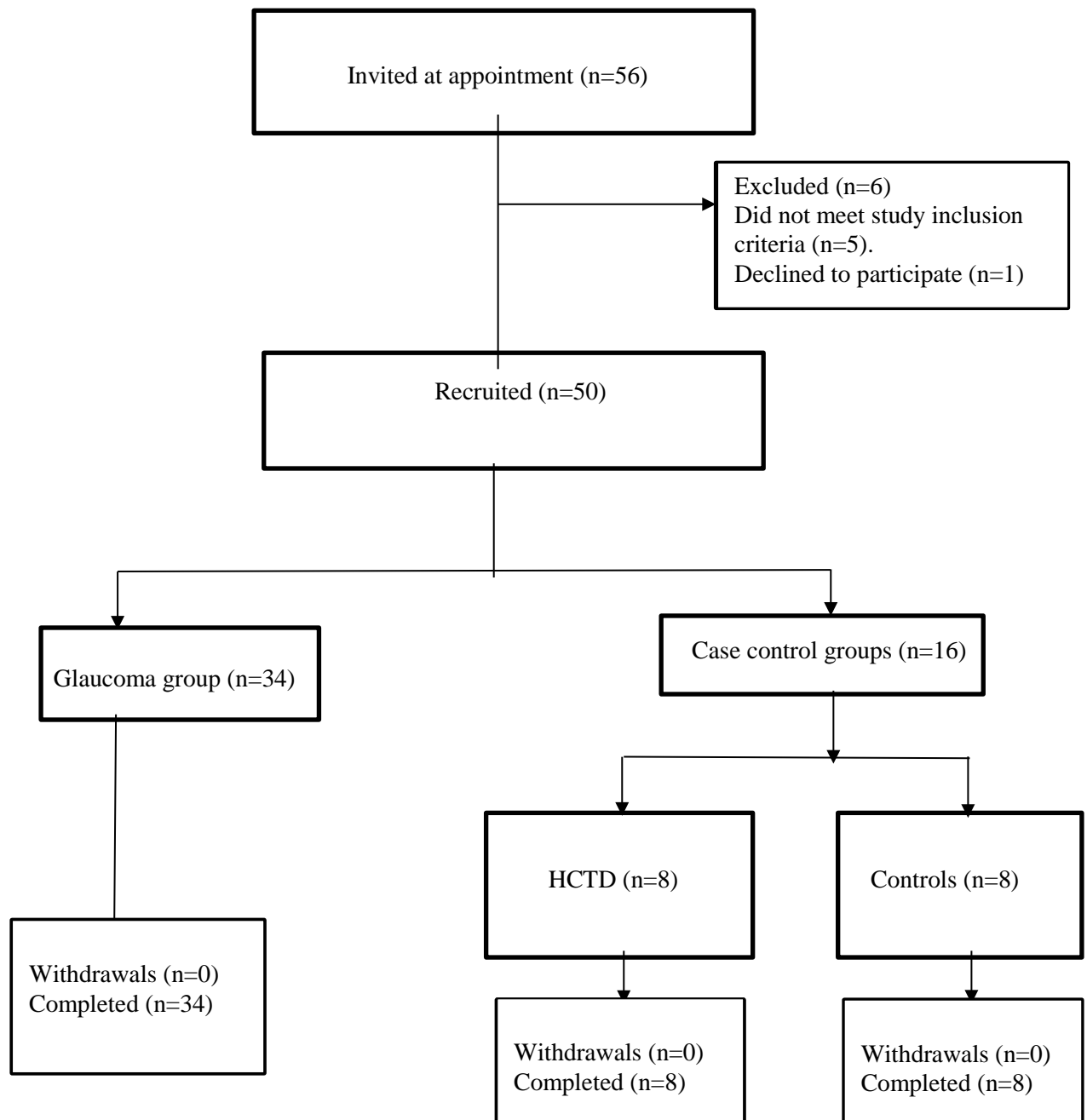


**Participant flow:**



**Fig 1.** Study flow chart, demonstrating the progress of participants from recruitment to completion.

**Baseline characteristics of participants:**

Characteristics of participants	N	%
Sample size	34	100
Gender		
Male	20	59
Female	14	41
Ethnicity		
Caucasian	21	62
Asian	12	35
Mixed Race	1	3
Age		
Group 1	18	53
Group 2	16	47
General health		
Good	17	50
Co-morbidities	17	50
Strabismus		
Yes	17	50
No	17	50
Ocular history		
PCG	6	18
Secondary	8	23
Uveitic	4	12
Aphakic	13	38
JOAG	3	9
Treatment		
Medical	9	26
Surgical	2	6
Both	23	68
Nystagmus		
Yes	11	32
No	23	68
Corneal defect		
Yes	29	85
No	5	15
BCVA		
Group 1	17	50
Group 2	17	50
Refractive error		
Group 1	15	44
Group 2	19	56

**Table 1.0** Baseline characteristics of glaucoma group (n = 34)

Characteristics of participants	N	%
Sample size	8	100
Connective tissue disease		
Marfan's syndrome	6	75
Ehlers Danlos syndrome	1	12.5
Non- Marfan's fibrinopathy	1	12.5

**Table 2.0** Baseline characteristics of connective tissue group (n = 8)

### Outcome measures:

	Minimum	Maximum	Mean	SD
GAT	9.0	38.0	17.6	7.1
RBT	9.0	48.0	20.0	9.1

Values are in mmHg

**Table 3.0** Descriptive statistics for RBT on- axis and GAT (n = 34)

	Mean	SD	<i>p</i>	Limits of agreement	
				Mean – 1.96 x S.D	Mean + 1.96 x S.D
RBT <sub>on</sub> - GAT	2.4	3.0	0.000	-3.48	8.28

Values are in mmHg

**Table 4.0** Mean difference, significance level and 95% confidence interval limits between RBT and GAT.

RBTmmHg	Minimum	Maximum	Mean	SD
RBT <sub>off</sub>	9.0	52.0	19.3	9.4
RBT <sub>on</sub>	9.0	48.0	20.0	9.1
GAT	9.0	38.0	17.6	7.1

**Table 5.0** Descriptive statistics for RBT<sub>off</sub>, RBT<sub>on</sub> and GAT (n = 34)

	Mean	SD	<i>p</i>	Limits of agreement	
				Mean – 1.96 x S.D	Mean + 1.96 x S.D
RBT <sub>off</sub> RBT <sub>on</sub>	-0.7	2.7	0.100	-6.00	4.51

Values are in mmHg

**Table 6.0** Mean difference, significance level and 95% confidence interval limits between RBT<sub>off</sub> and RBT<sub>on</sub>.

	Mean	SD	<i>p</i>	Limits of agreement	
				Mean – 1.96 x S.D	Mean + 1.96 x S.D
RBT <sub>off</sub> - GAT	-1.7	3.5	0.000	-5.21	8.51

Values are in mmHg

**Table 7.0** Mean difference, significance level and 95% confidence interval limits between RBT<sub>off</sub> and GAT.

HCTD	Minimum	Maximum	Mean	SD
RBT off	10.0	20.0	16.3	3.1
RBT on	11.00	22.0	18.1	3.5

Values are in mmHg

**Table 8.0** Descriptive statistics for connective tissue disease cohort (HCTD) RBT off- axis and RBT on-axis (n = 8).

Controls	Minimum	Maximum	Mean	SD
RBT off	10.0	22.0	16.3	3.9
RBT on	11.00	24.0	17.1	4.2

Values are in mmHg

**Table9.0** Descriptive statistics for age matched controls RBT off- axis and RBT on-axis (n = 8).

**Adverse events:**

There were no adverse events associated with this trial.