Supplemental data

Table S1: Final diagnosis of included malignant thyroid nodules.

First author, year	Papillary thyroid carcinoma (n)	Follicular thyroid carcinoma (n)	Hürthle cell carcinoma (n)	Medullary thyroid carcinoma (n)	Low differentiated carcinoma (n)	Anaplastic carcinoma (n)	Overall (n)
Mitchell, 2005 [34]	1	0	0	0	0	0	1
Hales, 2008 [35]	8	0	0	0	0	0	8
Deandreis, 2012 [36]	7	3	0	0	0	0	10
Muñoz Pérez, 2013 [37]	9	0	3	1	0	0	13
Merten, 2016 [38]	4	1	2	0	0	0	7
Pathak, 2016 [39]	17	2	0	0	0	0	19
Piccardo, 2016 [40]	13	5	0	0	0	0	18
Nguyen, 2018 [41]	18	9	0	1	2	1	31
Overall (n)	77	20	5	2	2	1	107

Legend: In Nguyen, 2018 three malignant nodules had unknown ^{18}F-FDG uptake and were excluded from the analysis.

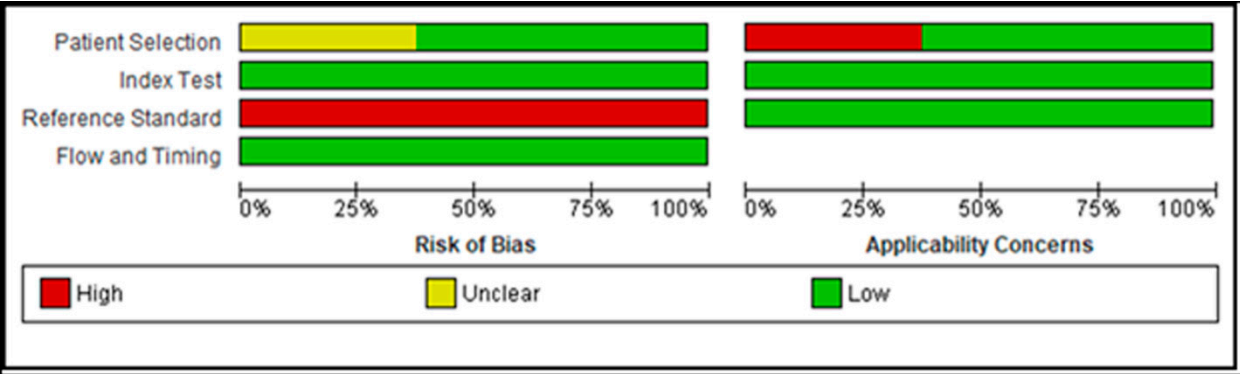**Table S2:** Final diagnosis of included benign thyroid nodules.

First author, year	Follicular adenoma (n)	Nodular hyperplasia (n)	Hürthle cell adenoma (n)	Tumor with uncertain malignant potential (n)	Multi nodular goiter (n)	Lymphocytic thyroiditis (n)	Other (n)	Overall (n)
Mitchell, 2005 [34]	16	0	1	0	6	0		23
Hales, 2008 [35]	0	2	0	0	2	2	2	8
Deandreis, 2012 [36]	21	0	11	12	0	0	0	46
Muñoz Pérez, 2013 [37]	6	20	5	0	0	2	0	33
Merten, 2016 [38]	-	-	-	-	-	-	-	44
Pathak, 2016 [39]	23	0	8	0	0	0	0	31
Piccardo, 2016 [40]	21	48	0	0	0	0	0	69
Nguyen, 2018 [41]	-	-	-	-	-	-	-	77
Overall (n)	87	70	25	12	8	4	0	331

Legend: In Nguyen, 2018 four benign nodules had unknown ^{18}F-FDG uptake and thus excluded from the analysis; - = not reported.
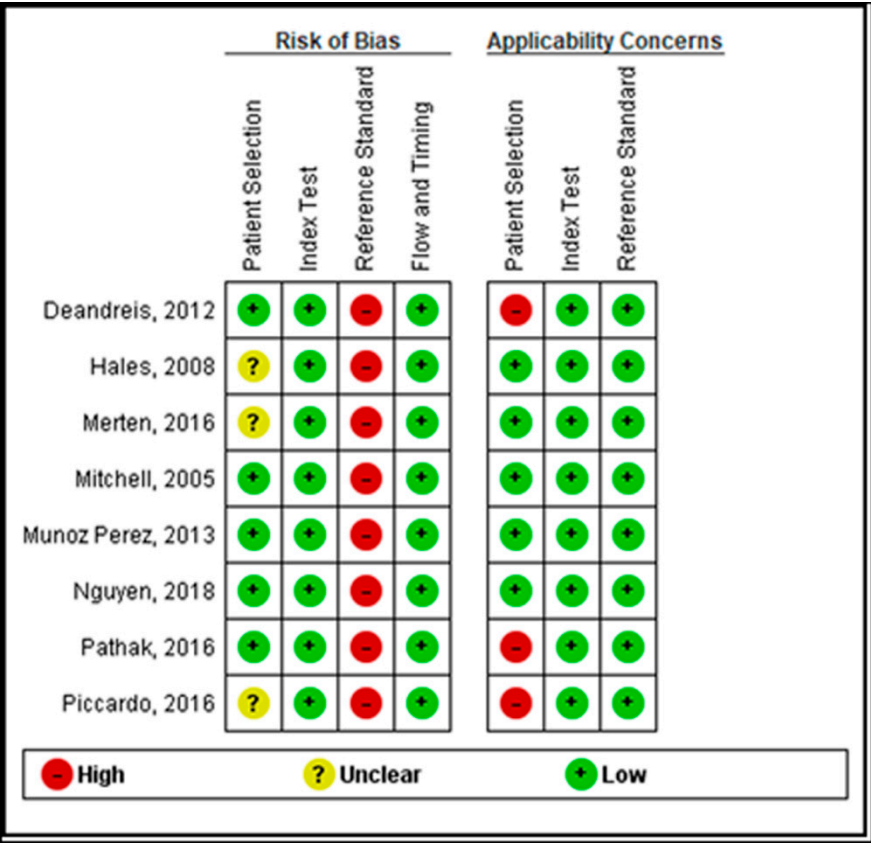

Table S3: Size of included thyroid nodules with indeterminate FNA.

First author, year	Median (mm)	Range (mm)	Mean (mm)	Standard deviation (mm)
Mitchell, 2005 [34]	-	-	-	-
Hales, 2008 [35]	-	1-53	-	-
Deandreis, 2012 [36]	21	10-57	-	-
Muñoz Pérez, 2013 [37]	-	10-85	28	-
Merten, 2016 [38]	18	8-74	-	-
Pathak, 2016 [39]	-	-	26	13
Piccardo, 2016 [40]	20	13-30	-	-
Nguyen, 2018 [41]	31	9-136	-	-

Legend: - = not reported.

1

Figure S1. Risk of bias and applicability concerns graph: review authors' judgements about each domain presented as percentages across included studies.

2

Figure S2. Risk of bias and applicability concerns summary: review authors' judgements about each domain for each included study.

3