

## 感度、特異度に関するメタアナリシス

### Bモードによる超音波検査（対照群）

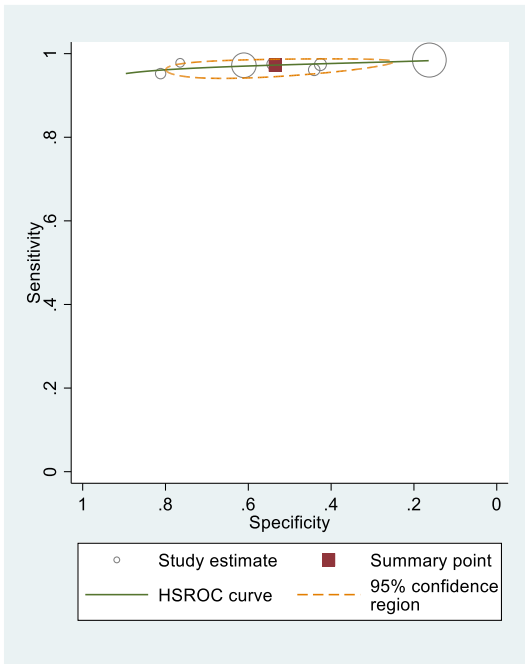
#### 用いた論文

	TP	FP	FN	TN
Berg 2012	281	253	8	397
Yi 2012	259	1275	4	248
Stachs 2013	113	62	3	46
Wang 2013	45	16	1	52
Li 2017	39	65	1	77
Xiao 2016	75	71	3	56
Redling 2017	60	19	3	82

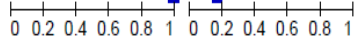
#### 結果

	点推定値	95%信頼区間
感度	97.3*	95.7-98.3
特異度	53.5	36.0-70.2
診断オッズ比	40.8	21.0-79.4
陽性尤度比	2.1	1.4-3.1
陰性尤度比	0.05	0.03-0.08

\*生検が予定された腫瘍を対象とした論文が多いため、感度が高いと考えられる。



Study	TP	FP	FN	TN	Sensitivity (95% CI)	Specificity (95% CI)	Sensitivity (95% CI)	Specificity (95% CI)
Berg 2012	281	253	8	397	0.97 [0.95, 0.99]	0.61 [0.57, 0.65]	■	■
Li 2017	39	65	1	77	0.97 [0.87, 1.00]	0.54 [0.46, 0.63]	■	■
Redling 2017	60	19	3	82	0.95 [0.87, 0.99]	0.81 [0.72, 0.88]	■	■
Stachs 2013	113	62	3	46	0.97 [0.93, 0.99]	0.43 [0.33, 0.52]	■	■
Wang 2013	45	16	1	52	0.98 [0.88, 1.00]	0.76 [0.65, 0.86]	■	■
Xiao 2016	75	71	3	56	0.96 [0.89, 0.99]	0.44 [0.35, 0.53]	■	■
Yi 2012	259	1275	4	248	0.98 [0.96, 1.00]	0.16 [0.14, 0.18]	■	■



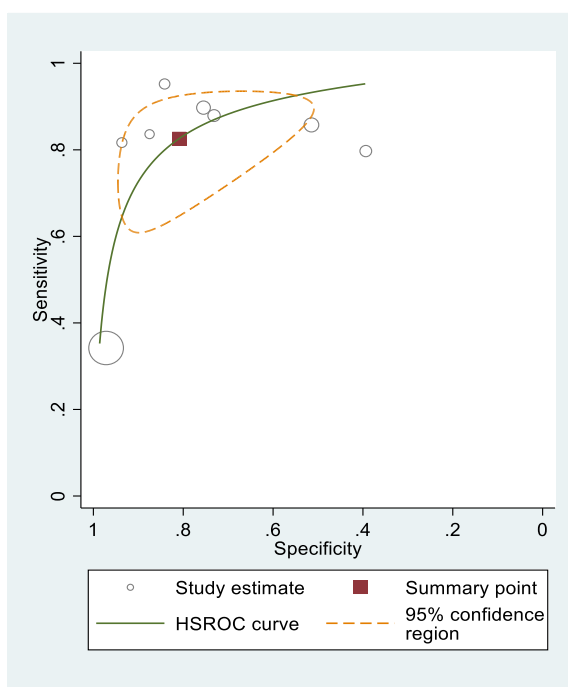
## Strain elastography (定性)

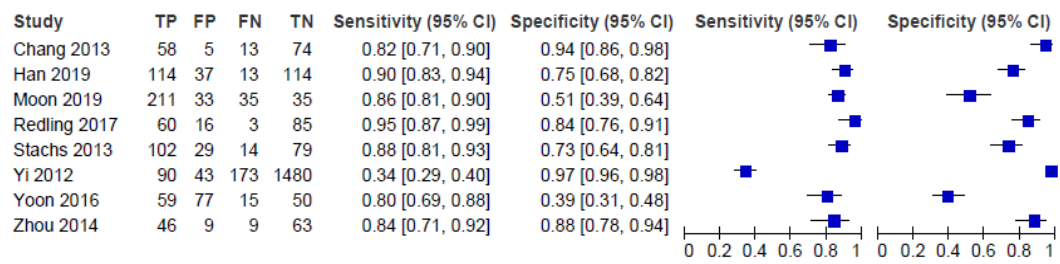
用いた論文

	TP	FP	FN	TN
Yi 2012	90	43	173	1480
Stachs 2013	102	29	14	79
Chang 2013	58	5	13	74
Zhou 2014	46	9	9	63
Han 2019	114	37	13	114
Moon 2019	211	33	35	35
Yoon 2016	59	77	15	50
Redling 2017	60	16	3	85

結果

	点推定値	95%信頼区間
感度	82.6	70.6-90.4
特異度	80.9	64.2-90.9
診断オッズ比	20.1	9.3-43.3
陽性尤度比	4.3	2.3-8.2
陰性尤度比	0.21	0.13-0.35





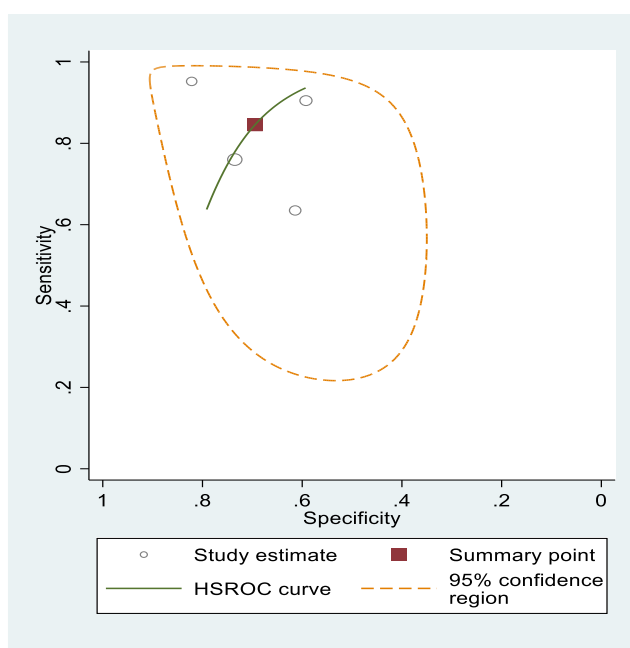
Strain elastography (半定量)

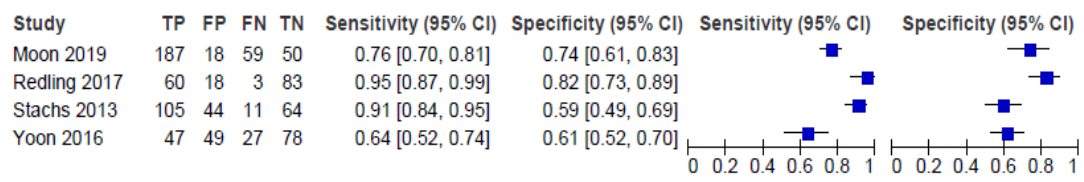
用いた論文

	TP	FP	FN	TN
Stachs 2013	105	44	11	64
Moon 2019	187	18	59	50
Yoon 2016	47	49	27	78
Redling 2017	60	18	3	83

結果

	点推定値	95%信頼区間
感度	84.5	67.9-93.4
特異度	69.4	59.0-78.2
診断オッズ比	12.4	3.6-42.8
陽性尤度比	2.8	1.8-4.2
陰性尤度比	0.22	0.09-0.54





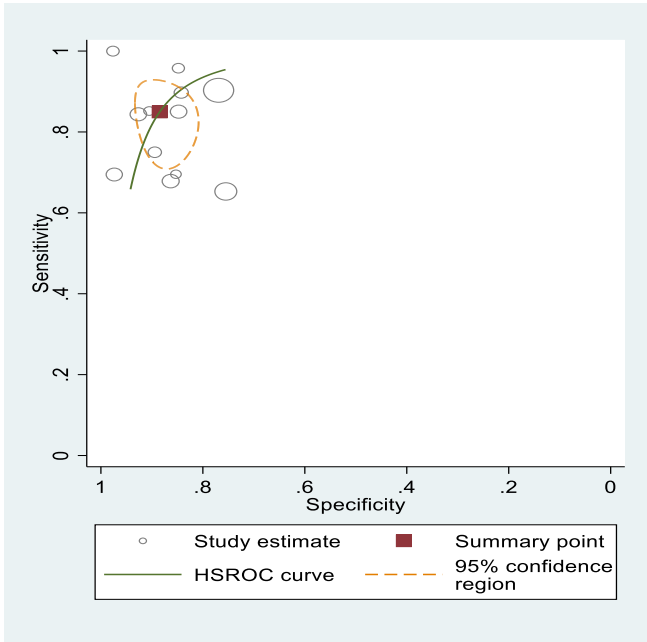
Shear wave elastography (定量)

用いた論文

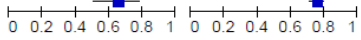
	TP	FP	FN	TN
Wang 2019	23	9	4	86
Berg 2012	261	150	28	500
Chang 2013	68	12	3	67
Wang 2013	32	10	14	58
Xiao 2016	70	20	8	107
Huang 2019	108	11	20	139
Ng 2016	74	2	0	83
Li 2017	30	15	10	127
Han 2019	108	23	19	128
Bai 2015	82	4	36	149
Li 2016	57	29	27	183
Zheng 2019	32	109	17	336

結果

	点推定値	95%信頼区間
感度	84.9	76.0-90.9
特異度	88.5	83.6-92.0
診断オッズ比	43.3	19.9-94.0
陽性尤度比	7.4	5.0-10.9
陰性尤度比	0.17	0.10-0.28



Study	TP	FP	FN	TN	Sensitivity (95% CI)	Specificity (95% CI)	Sensitivity (95% CI)	Specificity (95% CI)
Bai 2015	82	4	36	149	0.69 [0.60, 0.78]	0.97 [0.93, 0.99]	0.69	0.97
Berg 2012	261	150	28	500	0.90 [0.86, 0.93]	0.77 [0.73, 0.80]	0.90	0.77
Chang 2013	68	12	3	67	0.96 [0.88, 0.99]	0.85 [0.75, 0.92]	0.96	0.85
DanDan 2016	57	29	27	183	0.68 [0.57, 0.78]	0.86 [0.81, 0.91]	0.68	0.86
Han 2019	108	23	19	128	0.85 [0.78, 0.91]	0.85 [0.78, 0.90]	0.85	0.85
Huang 2019	108	11	20	139	0.84 [0.77, 0.90]	0.93 [0.87, 0.96]	0.84	0.93
Li 2017	30	15	10	127	0.75 [0.59, 0.87]	0.89 [0.83, 0.94]	0.75	0.89
Ng 2016	74	2	0	83	1.00 [0.95, 1.00]	0.98 [0.92, 1.00]	1.00	0.98
Wang 2013	32	10	14	58	0.70 [0.54, 0.82]	0.85 [0.75, 0.93]	0.70	0.85
Xiao 2016	70	20	8	107	0.90 [0.81, 0.95]	0.84 [0.77, 0.90]	0.90	0.84
Zheng 2019	32	109	17	336	0.65 [0.50, 0.78]	0.76 [0.71, 0.79]	0.65	0.76





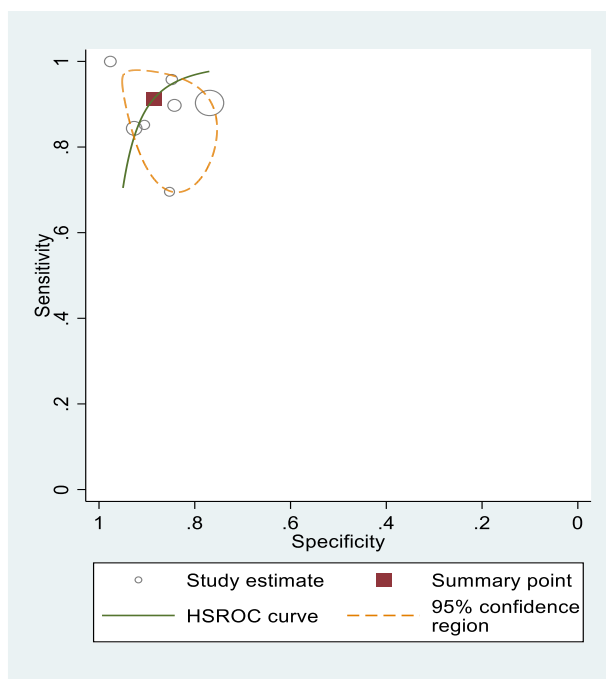
## Shear wave elastography (定量 Emax)

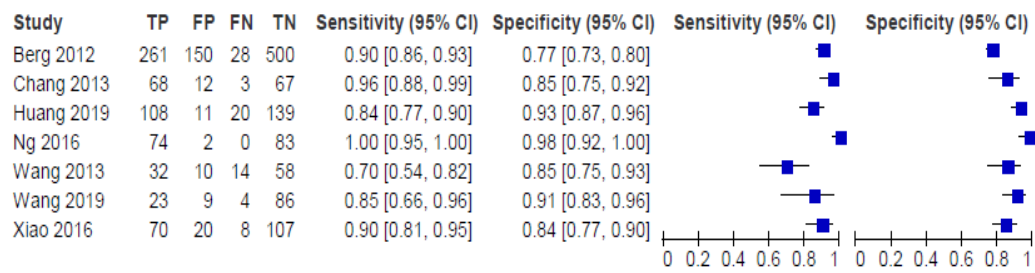
用いた論文

	TP	FP	FN	TN
Wang 2019	23	9	4	86
Berg 2012	261	150	28	500
Chang 2013	68	12	3	67
Wang 2013	32	10	14	58
Xiao 2016	70	20	8	107
Huang 2019	108	11	20	139
Ng 2016	74	2	0	83

結果

	点推定値	95%信頼区間
感度	91.3	81.3-96.2
特異度	88.6	81.9-93.0
診断オッズ比	80.9	24.0-272.4
陽性尤度比	8.0	4.8-13.3
陰性尤度比	0.10	0.04-0.23





Shear wave elastography (定量 Emean)

用いた論文

	TP	FP	FN	TN
Berg 2012	261	150	28	500
Wang 2013	21	10	25	58
Huang 2019	108	6	20	144
Xiao 2016	63	9	15	118
Ng 2016	74	3	0	82
Bai 2015	82	4	36	149

結果

	点推定値	95%信頼区間
感度	85.3	63.1-95.2
特異度	92.9	86.0-96.6
診断オッズ比	76.5	15.9-367.5
陽性尤度比	12.1	5.6-26.0
陰性尤度比	0.16	0.05-0.45

