



# Adenomiose

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# Conflito de interesse

Ache, Bayer, Ferring, Merck

**Table 2** Epidemiological data from the study population

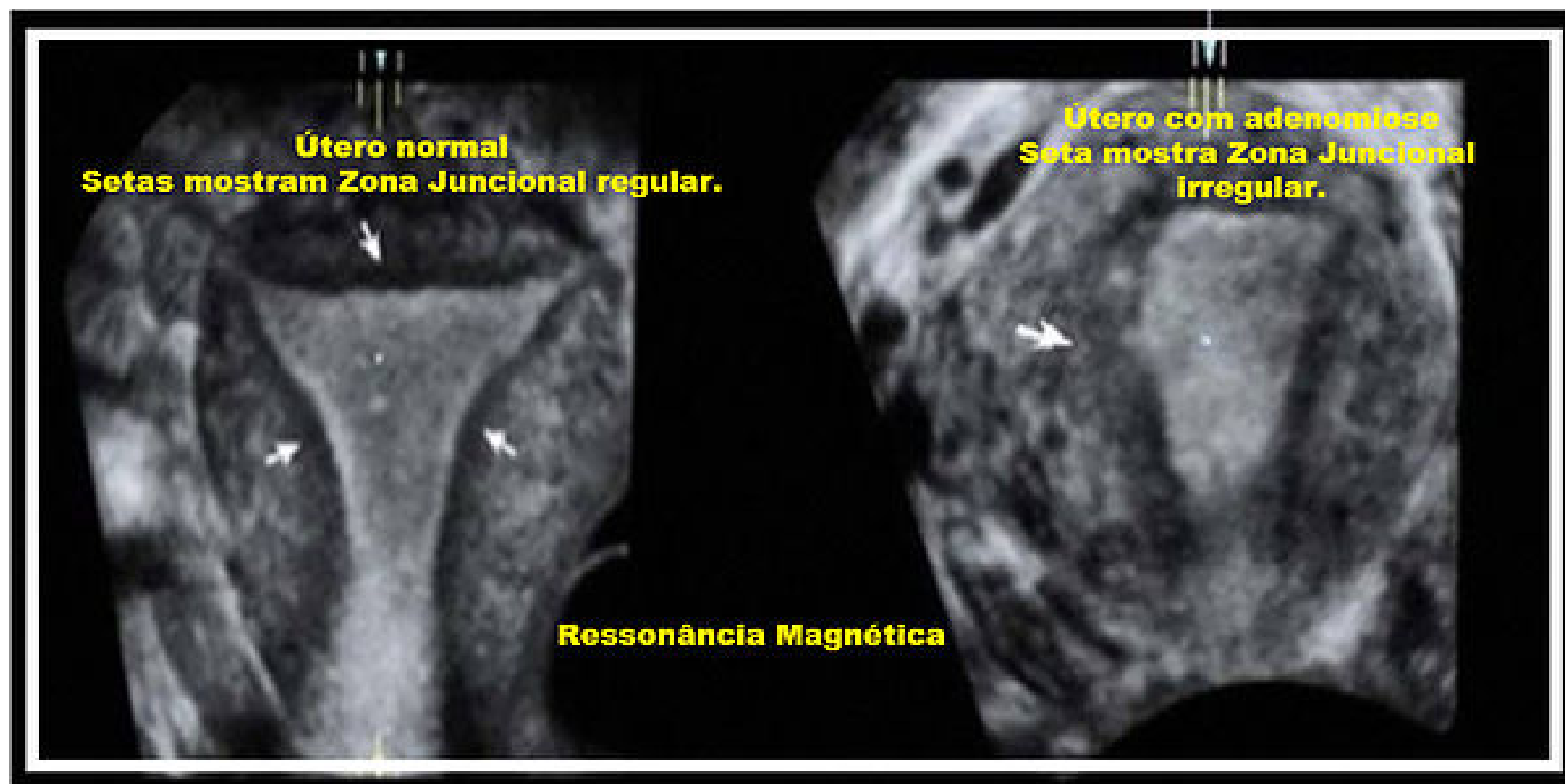
Variable	Adenomyosis n (%)	OR	<i>p</i>
Age < 40 y	154/699 (22.0)	0,67 (0,50–0,91)	<i>p</i> < 0.01
Age ≥ 40 y	94/316 (29.7)	1,50 (1,11–2,02)	<i>p</i> < 0.01
Smokers %	25/93 (26.8)	1,1 (0,70–1,84)	<i>p</i> = 0.56
Pregnancies			
0	233/963 (24.1)	0,7 (0,38–1,31)	<i>p</i> = 0.44
≥ 1	13/46 (28.2)	1,23 (0,63–2,38)	<i>p</i> = 0.53
Recurrent miscarriage (RM)	26/68 (38.2)	2,03 (1,21–3,39)	<i>p</i> < 0.005
ART failure	107/305 (34.7)	2,14 (1,59–2,89)	<i>p</i> < 0.0001
Endometriosis	34/97 (35.1)	1,77 (1,14–2,77)	<i>p</i> = 0.01
Fibroids	48/266 (18)	0,60 (0,42–0,85)	<i>p</i> < 0.005

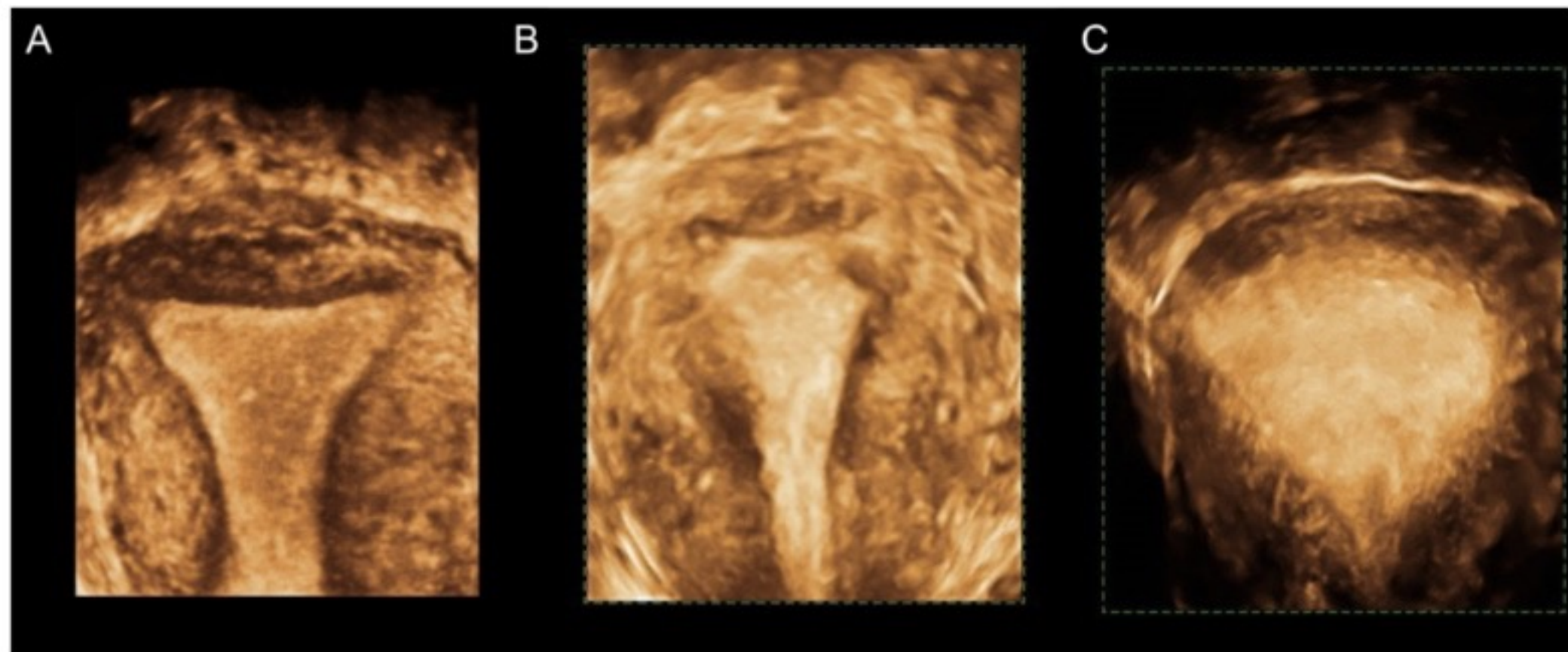
# Adenomiose

- Aumento risco:
  - ✓ TPP
  - ✓ Ruptura uterina (difusa)
  - ✓ Ruprema
  - ✓ Aborto
  - ✓ Pré-eclampsia
  - ✓ EDT

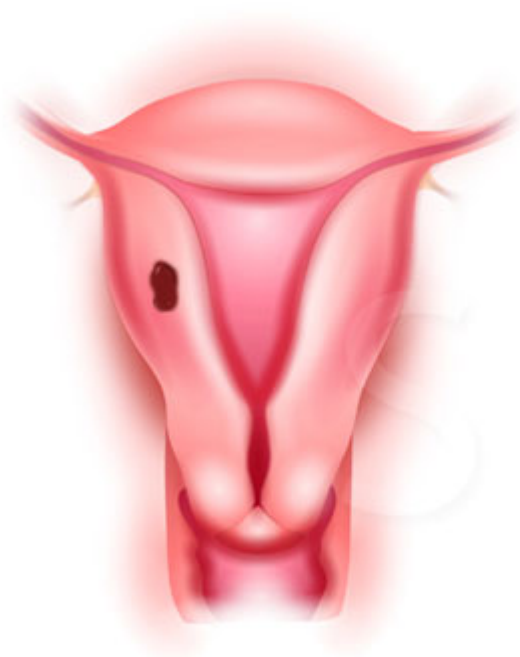
# Achados ecográficos

1. Útero globoso e aumentado
2. Áreas anecóicas intramiométriais
3. Espessamento da parede uterina
4. Estrias lineares ecogênicas subendometriais
5. Miométrio de textura heterogênea
6. Má definição dos limites do miométrio / endométrio
7. Espessamento da zona juncional - 12 mm ou mais





**Fig. 3** Evaluation of the JZ using 3D surface reconstruction mode. **a** Normal JZ. **b** and **c** thickened, irregular JZ, where it is not possible to adequately differentiate the endometrial-myometrial transition



Focal



Adenomyoma



Diffuse



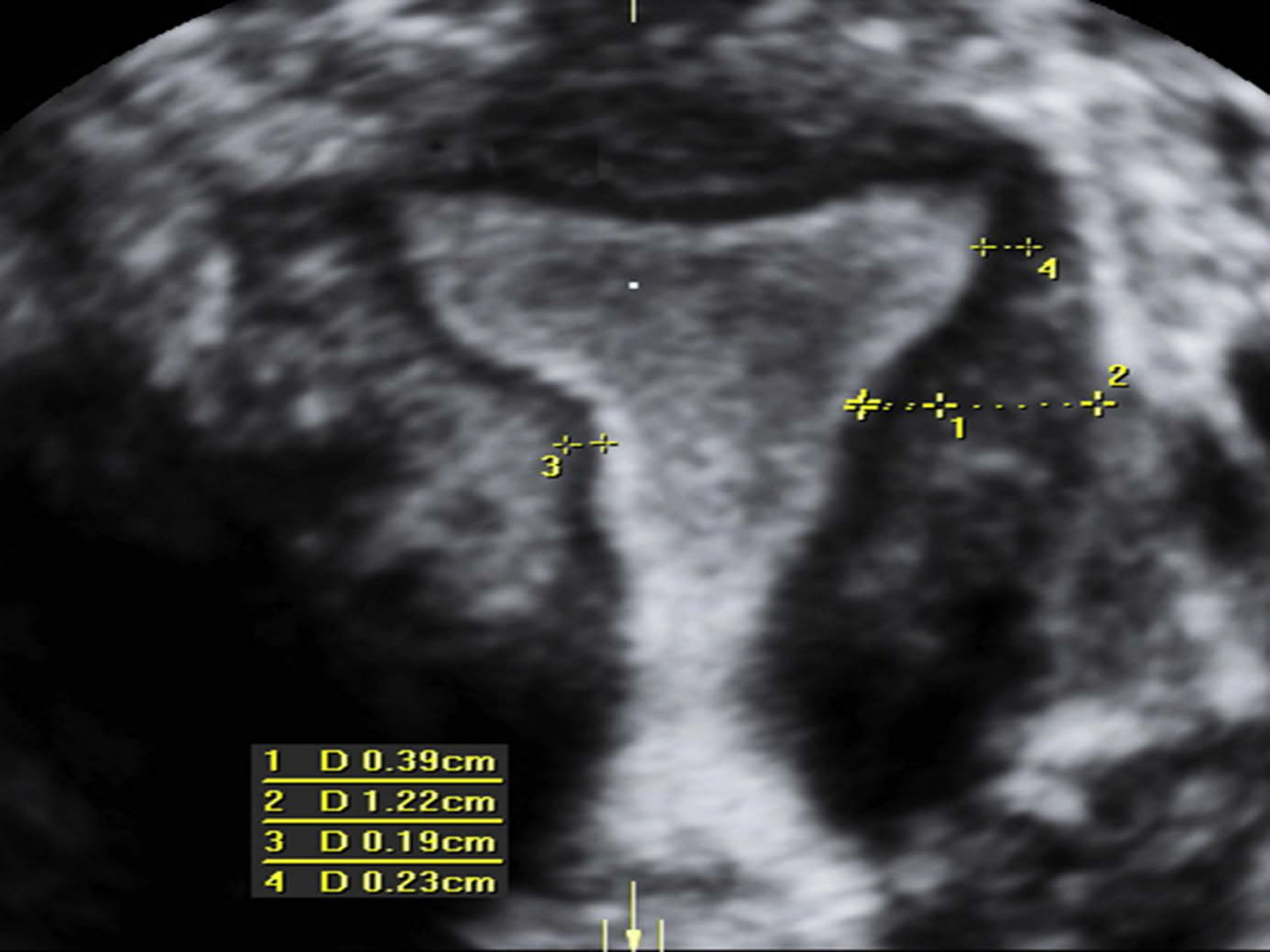
[2D] G61/92dB/FA8/P90/FSI 1

SRF

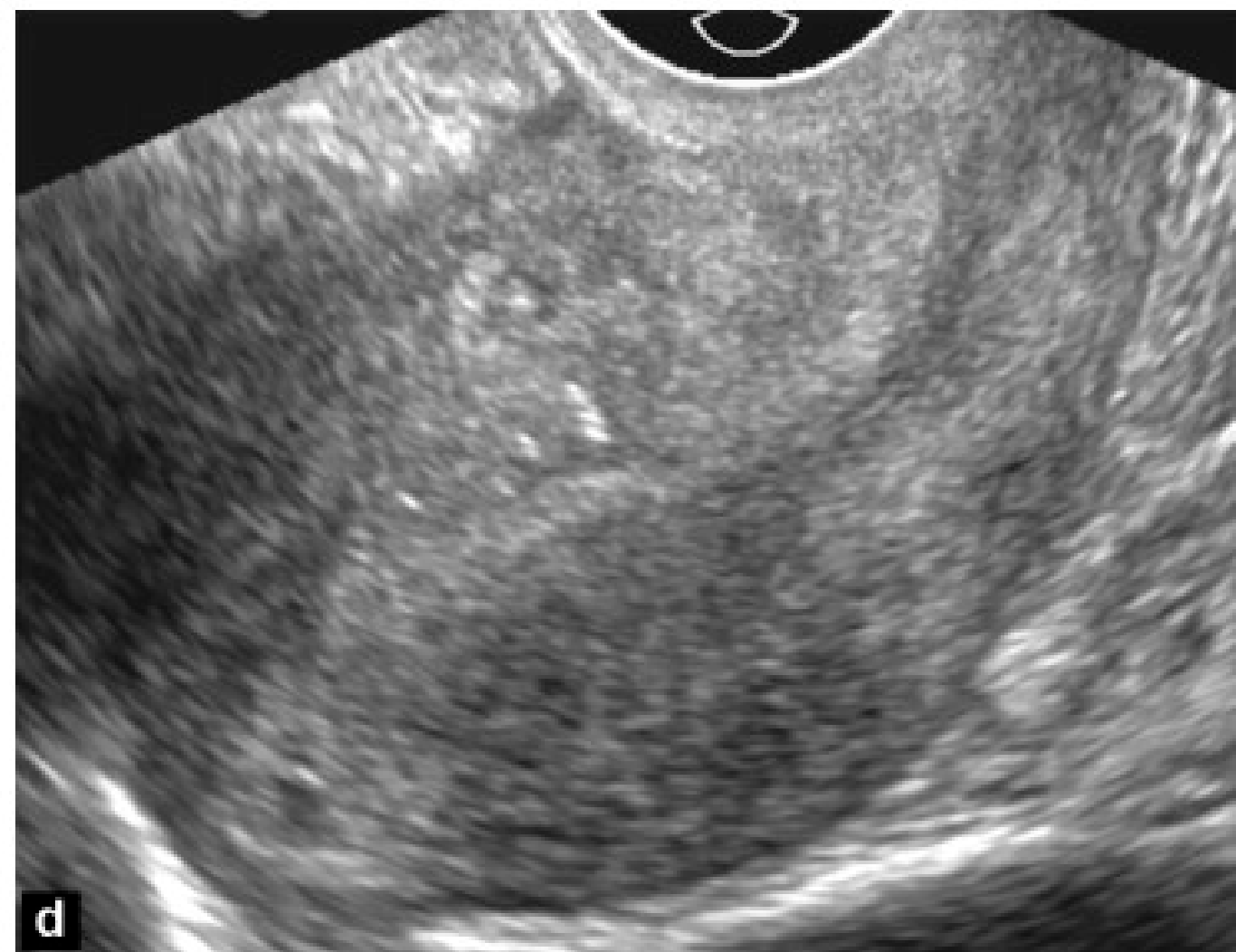
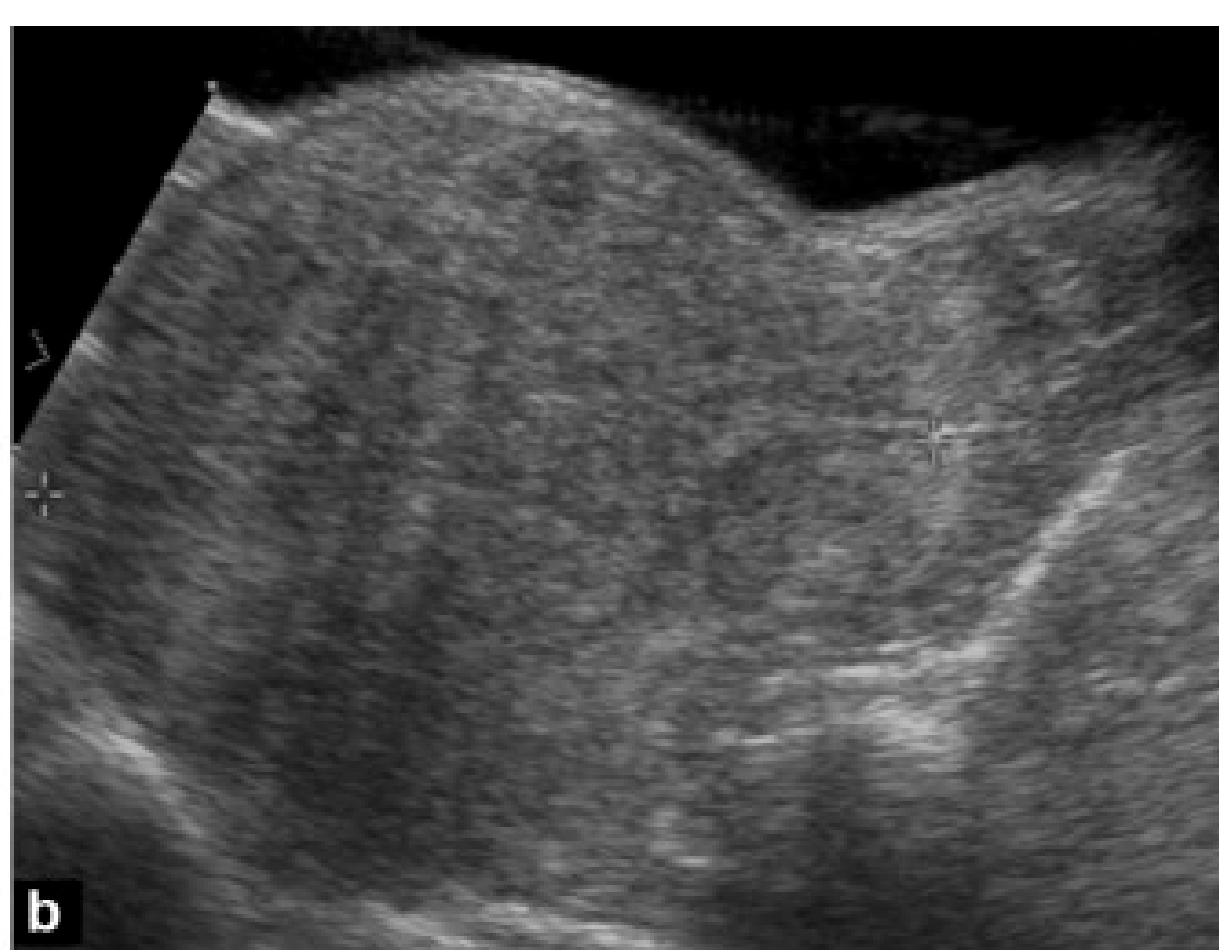


ADENOMIOSE

D1 0.41cm



1	D 0.39cm
2	D 1.22cm
3	D 0.19cm
4	D 0.23cm



**Table II** MRI adenomyosis appearance distribution according to the surgical endometriosis phenotype.

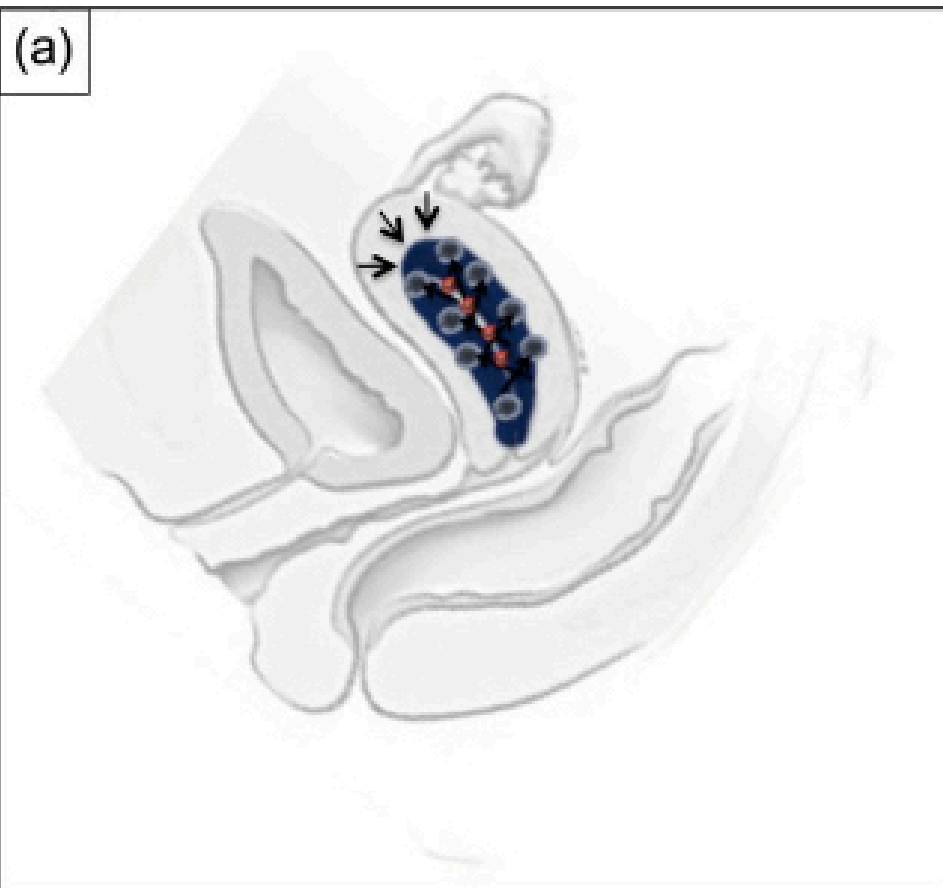
Phenotype		Adenomyosis (n, %)				No adenomyosis (n, %)
		Isolated diffuse	Associated diffuse and FAOM	Isolated FAOM	Total	Total
Endometriosis free (n, %)	55	19 (34.5)	1 (1.8)	2 (3.6)	22 (40.0)	33 (60.0)
Endometriosis (n, %)	237	34 (14.3)	47 (19.8)	72 (30.4)	153 (64.6)	84 (35.4)
P-value*		<0.001	<0.001	<0.001	<0.001	
Endometriosis phenotype						
SUP (n, %)	40	6 (15.0)	2 (5.0)	1 (2.5)	9 (22.5)	31 (77.5)
OMA (n, %)	31	9 (29.0)	5 (16.1)	1 (3.2)	15 (48.4)	16 (51.6)
DIE (n, %)	166	19 (11.4)	40 (24.1)	70 (42.2)	129 (77.7)	37 (22.3)
P-value**		0.170	<0.001	<0.001	<0.001	
Total (n, %)	292	53 (18.2)	48 (16.4)	74 (25.3)	175 (59.9)	117 (40.1)

FAOM, focal adenomyosis located in the outer myometrium; SUP, superficial peritoneal endometriosis; DIE, deep infiltrating endometriosis; MRI, magnetic resonance imaging.

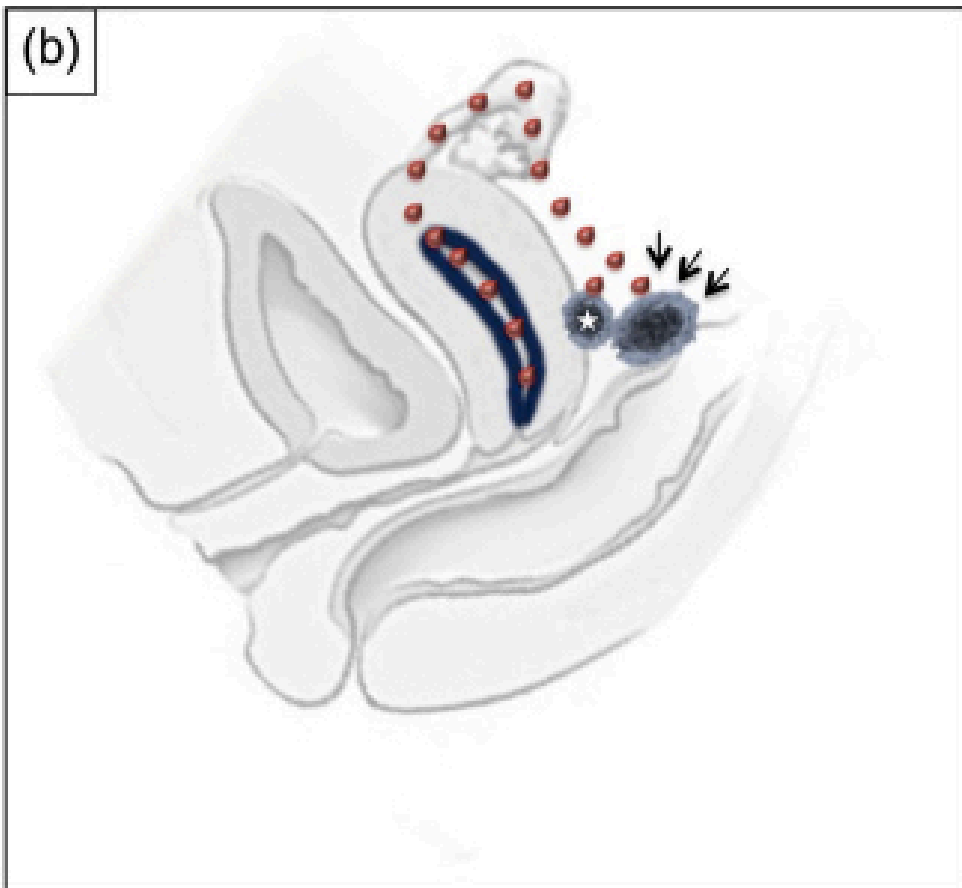
\*Chi<sup>2</sup>-test P-value: variables are categorized into two groups (endometriosis versus no endometriosis).

\*\*Chi<sup>2</sup>-test P-value: variables are categorized into four groups: SUP, OMA, DIE and no endometriosis group.

(a)

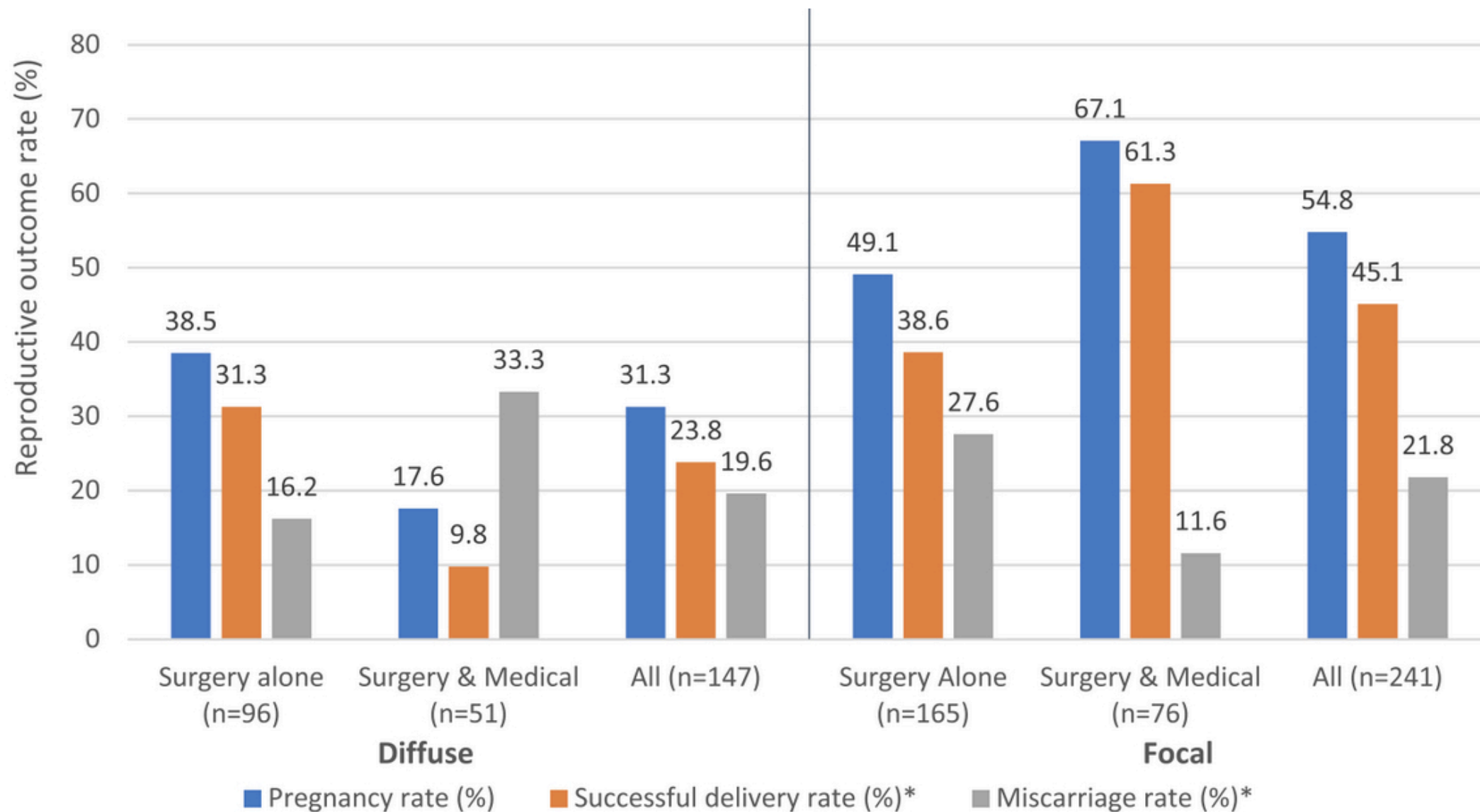


(b)

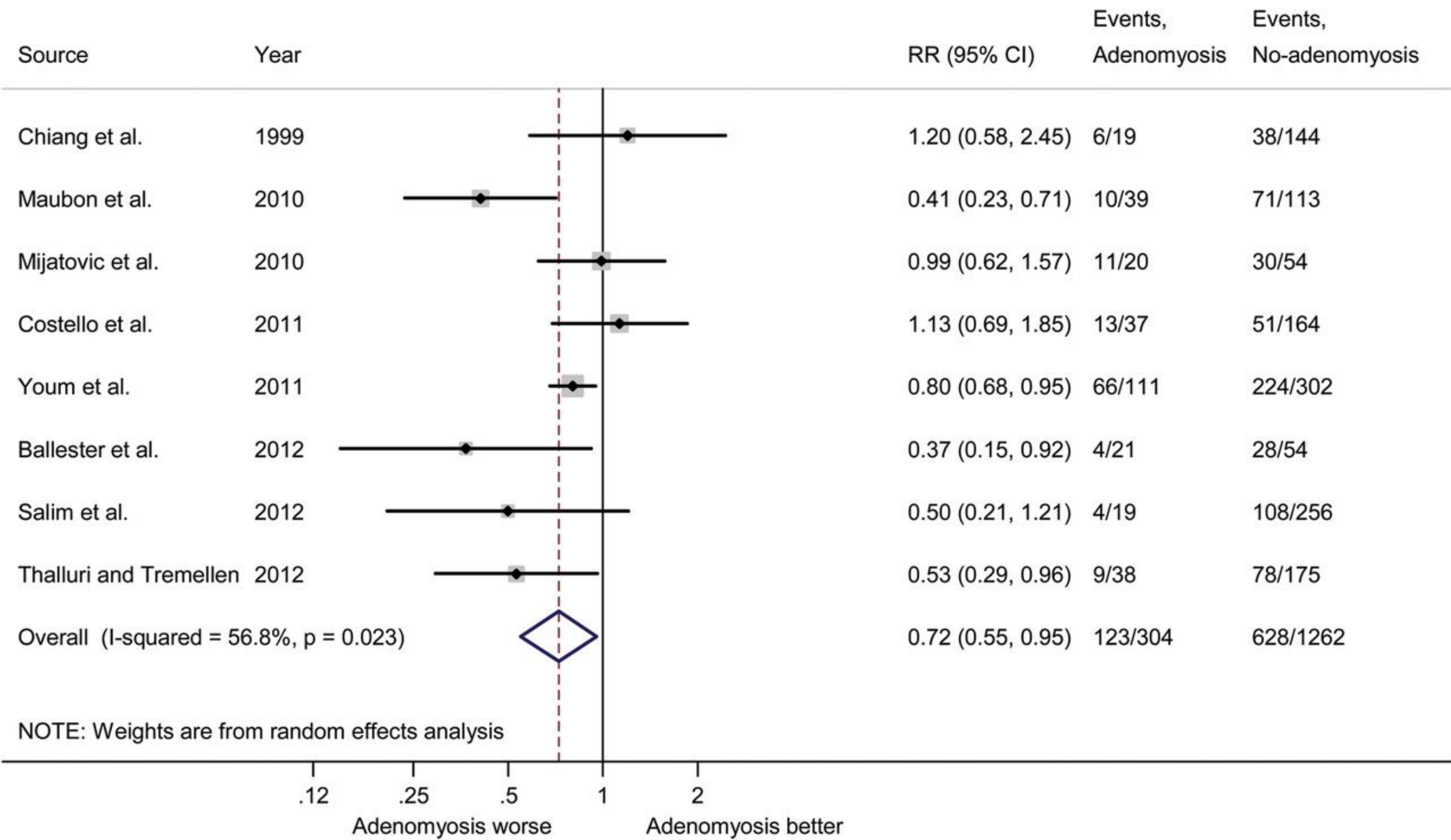




# Difusa x focal

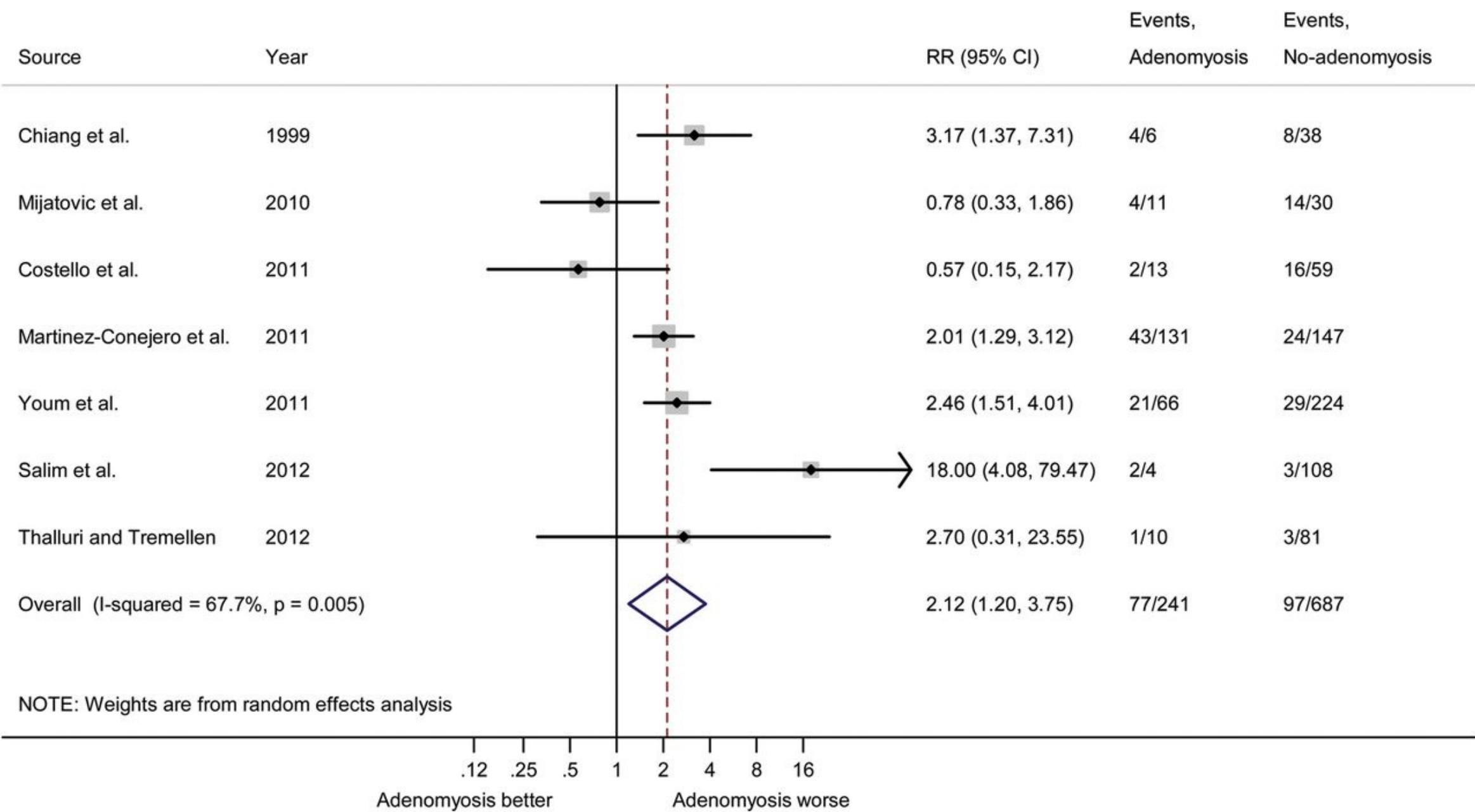


**Forest plot showing individual and combined effect size estimates and 95% confidence intervals (CIs) in studies that evaluated the likelihood of clinical pregnancy in infertile women with or without adenomyosis undergoing IVF/ICSI.**



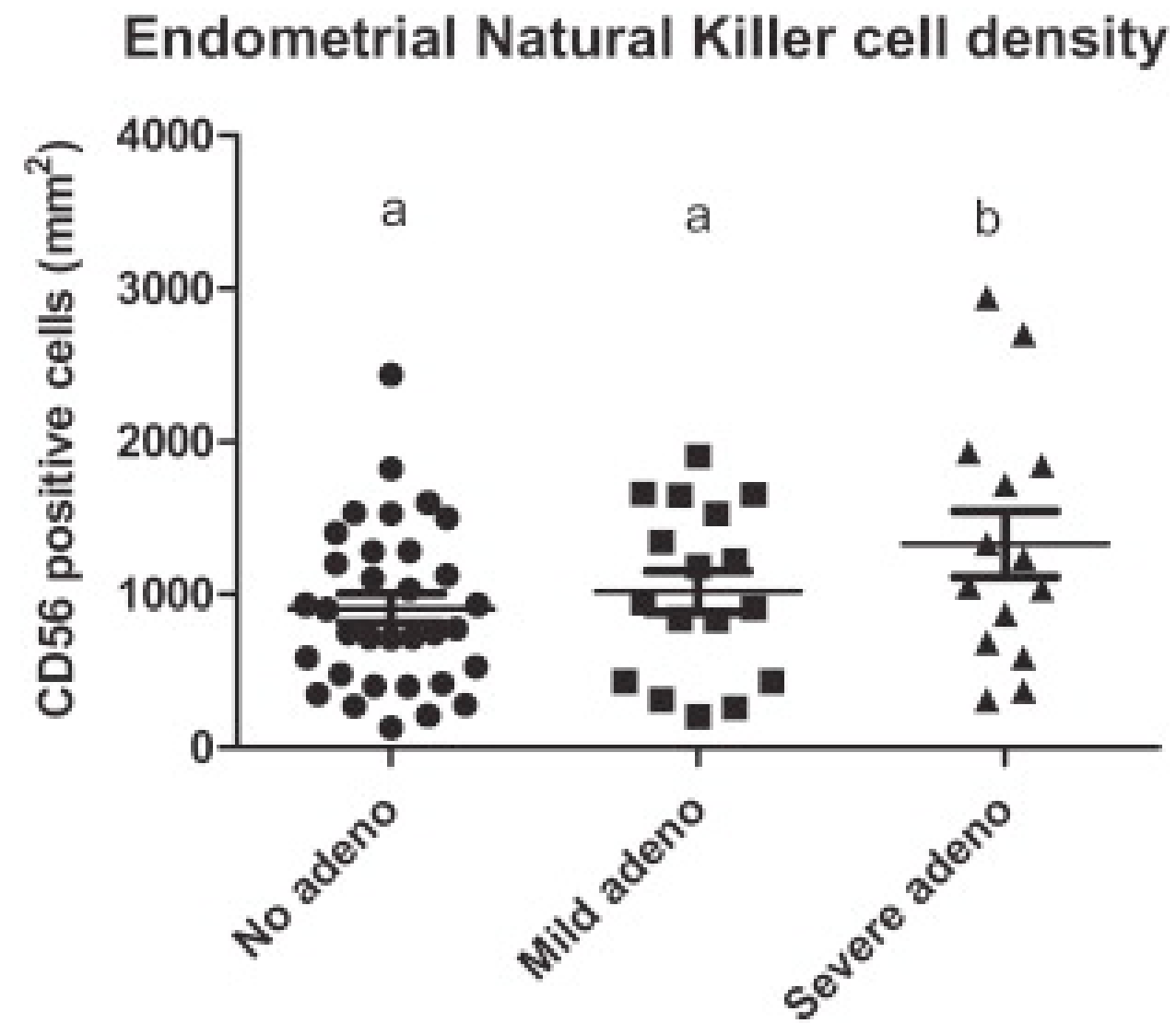
**Paolo Vercellini et al. Hum. Reprod. 2014;29:964-977**

**Forest plot showing individual and combined effect size estimates and 95% confidence intervals (CIs) in studies that evaluated the risk of miscarriage in clinical pregnancies obtained at IVF/ICSI in women with or without adenomyosis.**

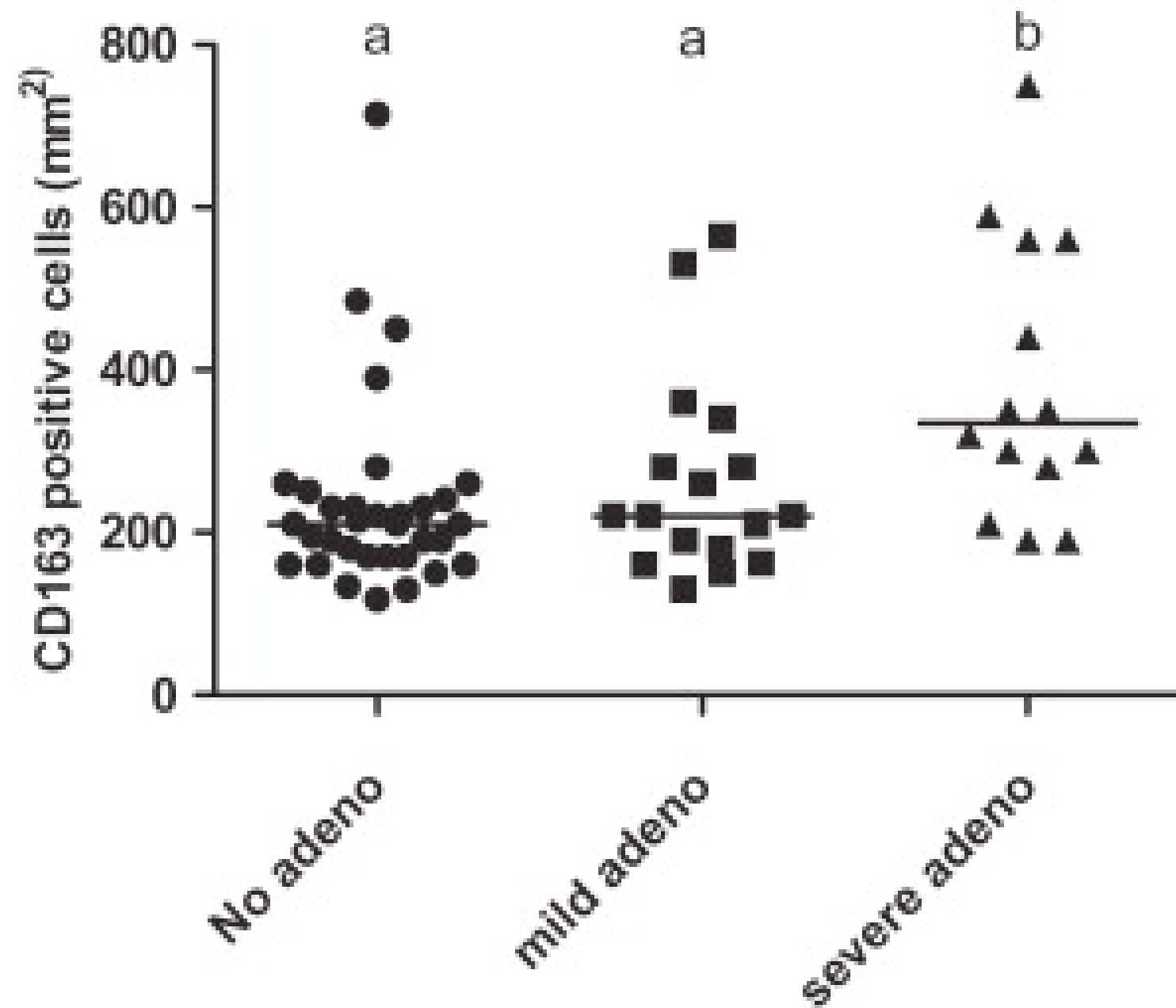


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## Endometrial macrophage density



# Trattamento medicamentoso?

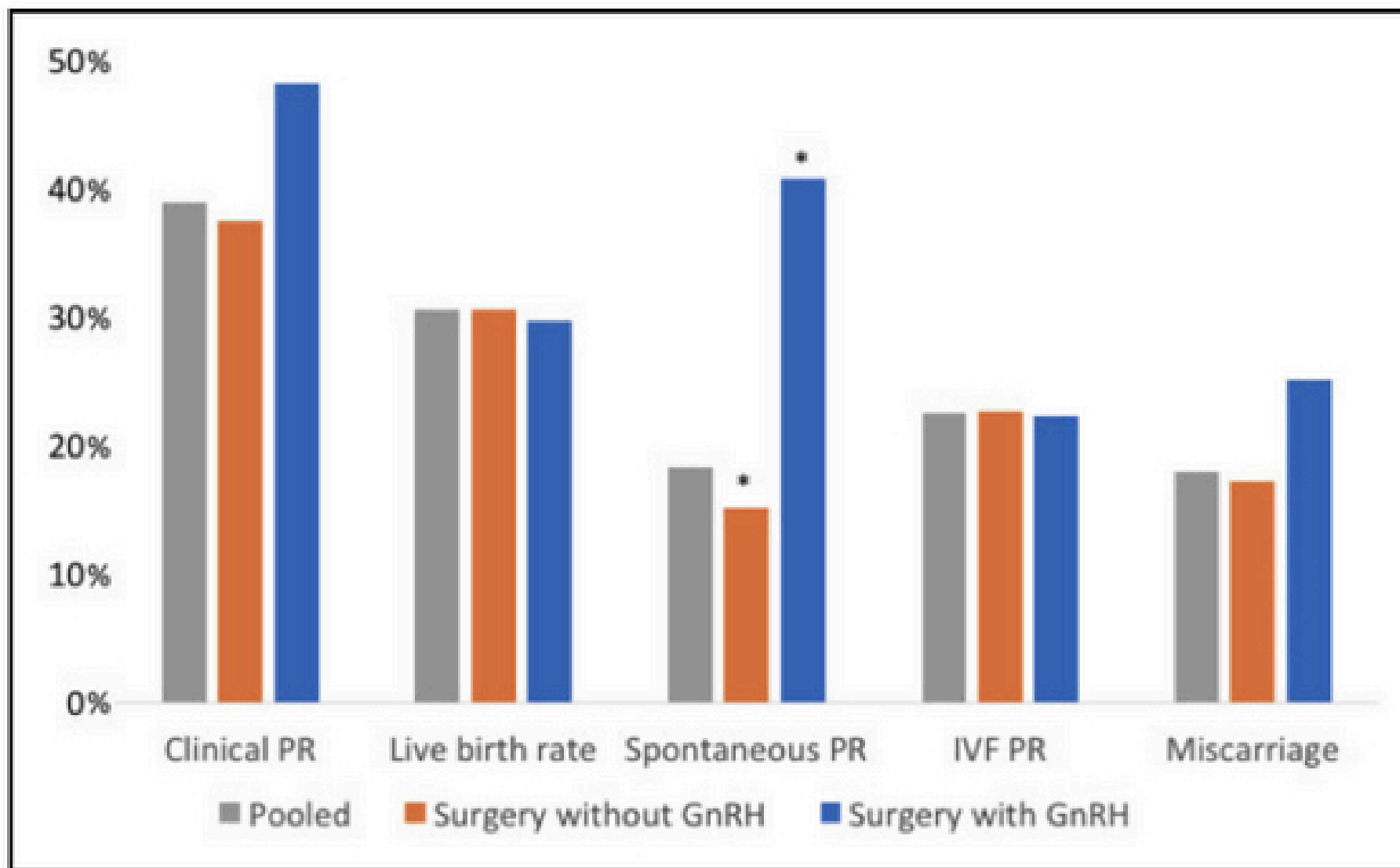
## Summary of commonly used drugs for adenomyosis.

Class of compound	Mechanisms of action	Effects	Side effects
GnRH analogues	Hypoestrogenic state Antiproliferative effect Increased apoptosis	Significant reduction of uterine size, bleeding and pain in short term period Improvement of pregnancy rate in ART cycles	Menopausal symptoms (i.e., vasomotor syndrome, reduced bone mineral density, genital atrophy, mood instability) Consider add-back therapy for prolonged treatment
Progestins	Decidualization and then atrophy of endometrial tissue Mild hypoestrogenism Antiproliferative effect Anti-inflammatory effect	Significant reduction of pain and bleeding	Breakthrough bleeding
LNG-IUS	Endometrial atrophy Direct local action on adenomyotic foci	Significant reduction of menstrual loss, with increase in hemoglobin, hematocrit and ferritin Decreased uterine volume and pain symptoms	Irregular bleeding Amenorrhea
COCs	Decidualization and subsequent atrophy of the endometrium	Benefit from the resulting amenorrhea	Spotting Headache Thromboembolic events
NSAIDs	Reduced prostaglandins synthesis	Reduced pain and bleeding	Gastrointestinal side-effects

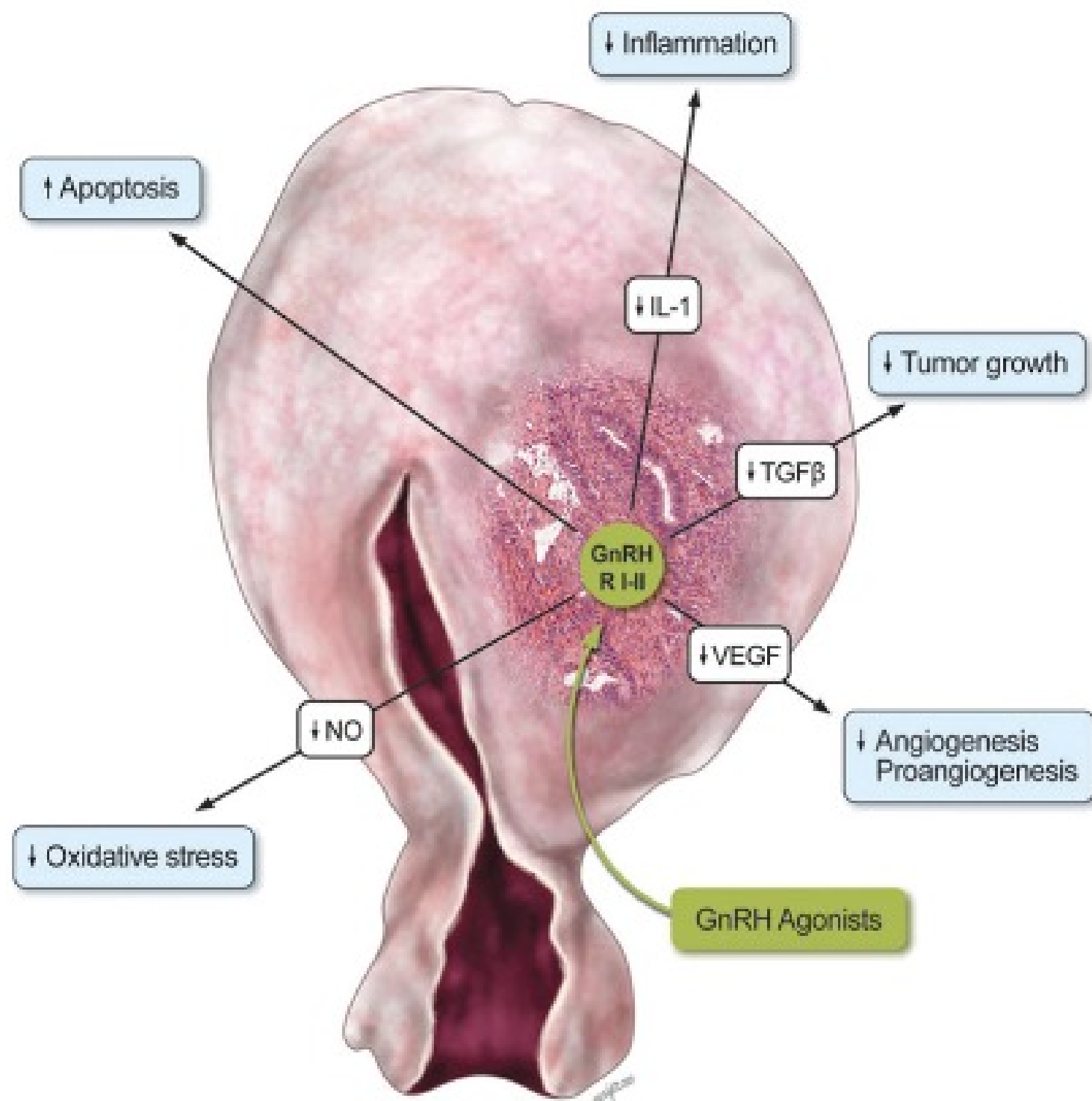
Note: COCs = combined oral contraceptives; GnRH analogues = gonadotropin releasing hormone analogues; LNG-IUS = levonorgestrel-releasing intrauterine system; NSAIDs = nonsteroidal anti-inflammatory drugs.

Vannuccini. Medical management of adenomyosis. Fertil Steril 2018.

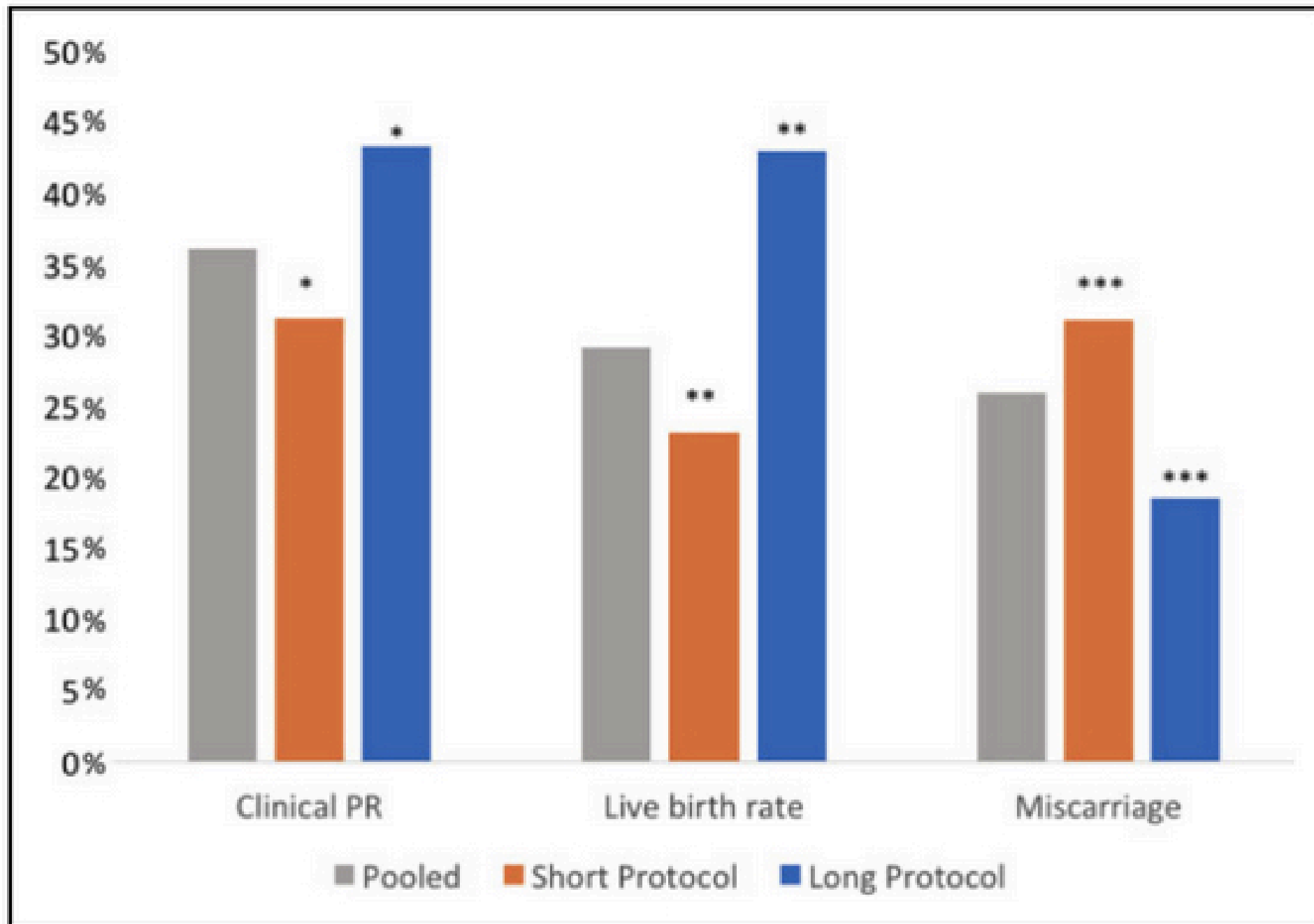
# Cirurgia?



**Figure 2.** Surgical treatment for adenomyosis and fertility outcomes.



# Agonista GnRH



# adenomiose?

- Afeta % gesta após FIV
- Não é causa isolada de infertilidade (Tuba/EDT)
- Tratamento medicamentoso impede gestação
- > 35 anos com TE boa qualidade
- RNM/US-TV para diagnóstico



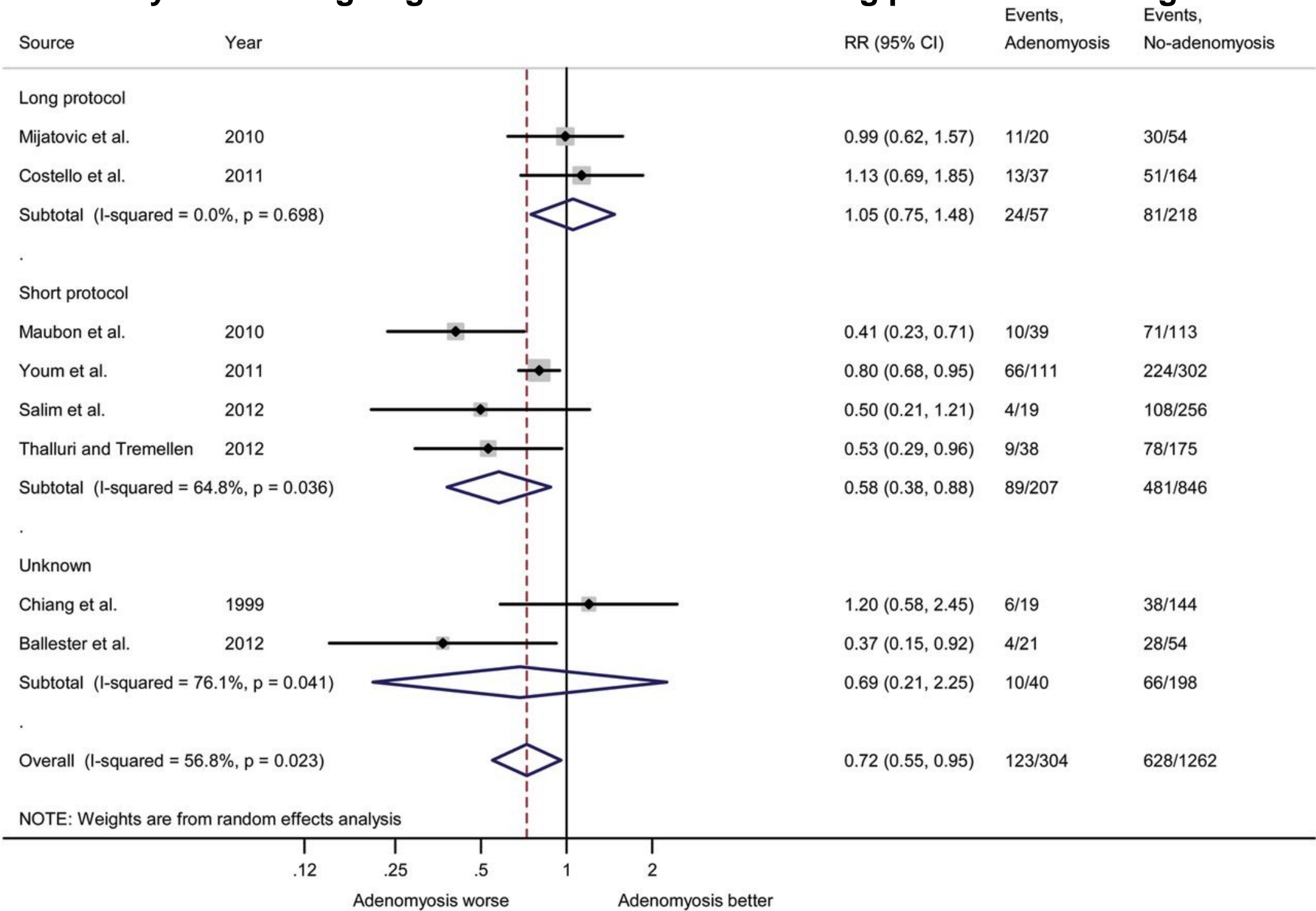
# qual melhor evidência?

- Tratamento por 3 meses com agonista GnRH  
(retrospectivo)
- Tratamento agonista + congelar embriões (retrospectivo)
- Usar o melhor embrião possível (Blasto euploide)



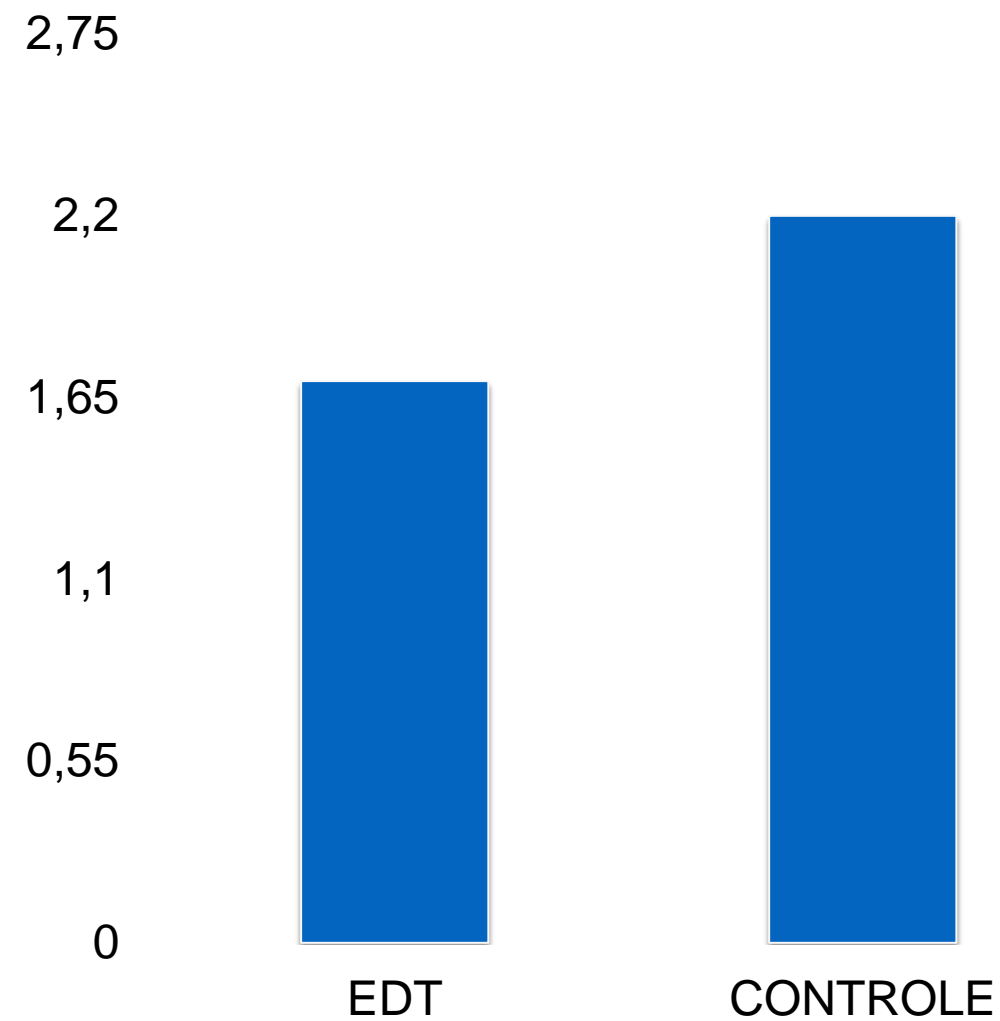


**Forest plot showing individual and combined effect size estimates and 95% confidence intervals (CIs) in studies that evaluated the likelihood of clinical pregnancy in infertile women with or without adenomyosis undergoing IVF/ICSI after a short or long protocol down-regulation.**



**Paolo Vercellini et al. Hum. Reprod. 2014;29:964-977**

# Reserva ovariana e endometriose



# Conclusões

- adenomiose parece associar-se a falha de FIV em uma população com mais de 35-40 anos
- não há necessidade de rastreio universal
- melhor tratamento seria uso agonista GnRH por 3 meses antes da FIV
- priorizar transferência de blastocisto
- no futuro destruição adenomioma?