- PARASSITI D'ITALIA -

UNA RETE AL SERVIZIO
DEL SISTEMA SANITARIO NAZIONALE

Uomo + Animali = Una sola salute

Giovedì, 20 ottobre 2011 ore 15.00 – 18.30

CAMERA DEI DEPUTATI
Palazzo Marini - Sala delle Colonne
Via Poli, 19 - Roma

Venerdì, 21 ottobre 2011 ore 8.30 – 18.30

CAMERA DEI DEPUTATI
Palazzo Marini - Sala delle Conferenze
Via del Pozzetto, 158 - Roma (Piazza San Silvestro)

TOXOPLASMA GONDI

Problemi diagnostici

Valeria Meroni

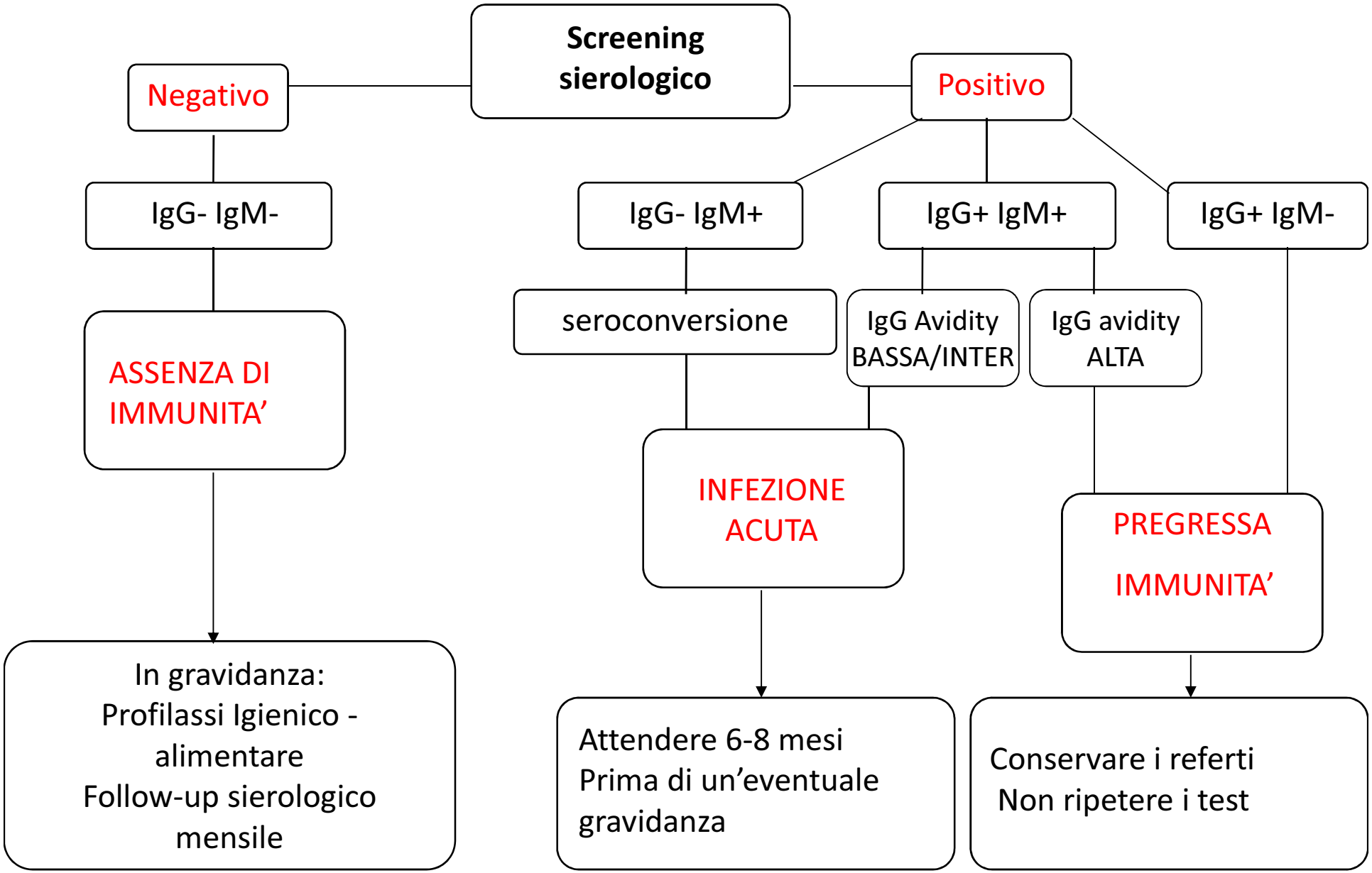
Dipartimento di Malattie Infettive Università di Pavia

Virologia e Microbiologia

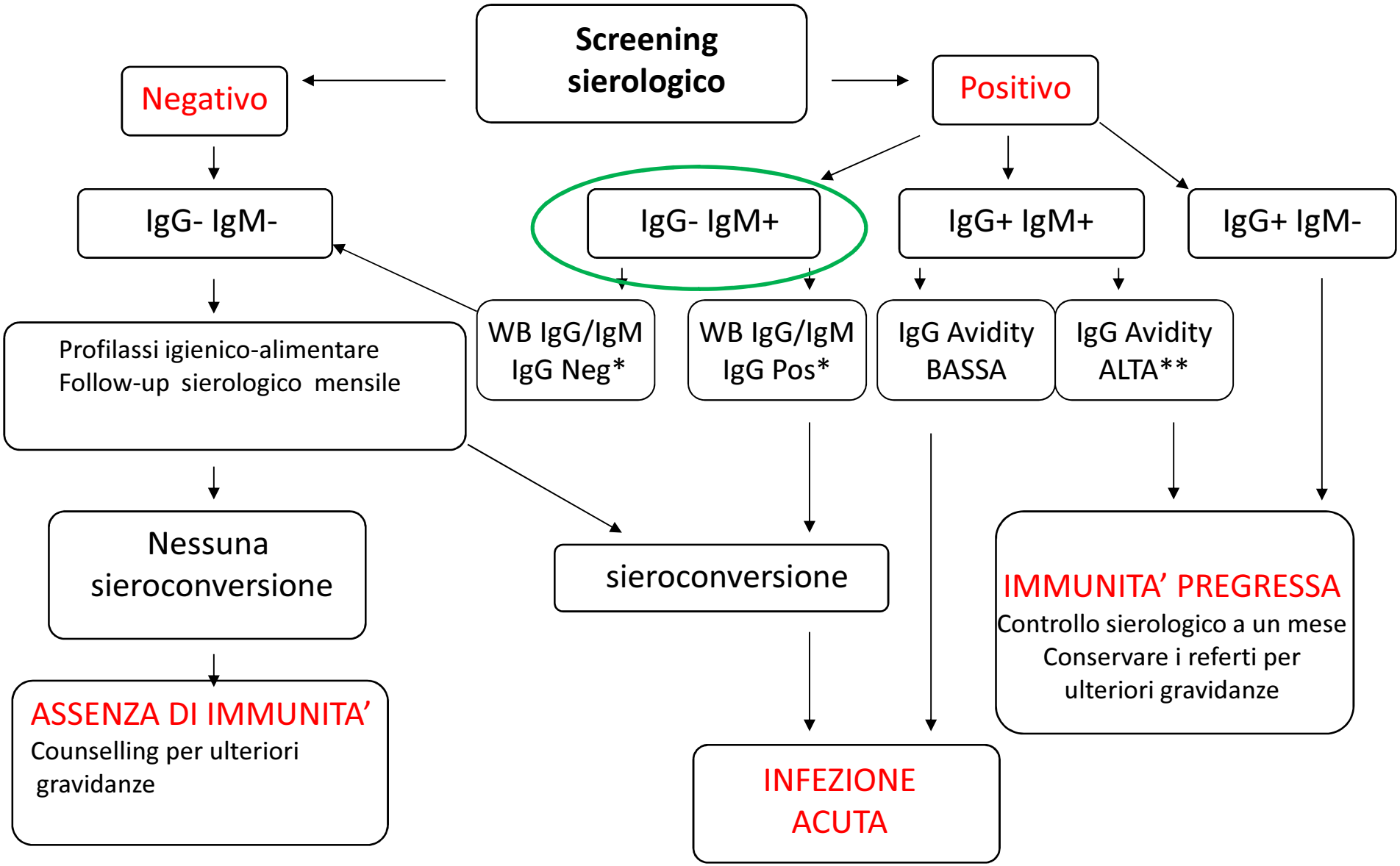
Fondazione IRCCS Policlinico San Matteo

Pavia

Diagnosi dell'infezione da *Toxoplasma gondii* pregravidanza



Diagnosi della toxoplasmosi in gravidanza



* Nei successivi controlli settimanali in assenza di terapia

** Se il test viene eseguito nel primo trimestre di gravidanza

Effectiveness of prenatal treatment for congenital toxoplasmosis: a meta-analysis of individual patients' data

UA1

The SYROCOT (Systematic Review on Congenital Toxoplasmosis) study group*

Summary

Background Despite three decades of prenatal screening for congenital toxoplasmosis in some European countries, uncertainty remains about the effectiveness of prenatal treatment.

Methods We did a systematic review of cohort studies based on universal screening for congenital toxoplasmosis. We did a meta-analysis using individual patients' data to assess the effect of timing and type of prenatal treatment on mother-to-child transmission of infection and clinical manifestations before age 1 year. Analyses were adjusted for gestational age at maternal seroconversion and other covariates.

Findings We included 26 cohorts in the review. In 1438 treated mothers identified by prenatal screening, we found weak evidence that treatment started within 3 weeks of seroconversion reduced mother-to-child transmission compared with treatment started after 8 or more weeks (adjusted odds ratio [OR] 0·48, 95% CI 0·28–0·80; p=0·05). In 550 infected liveborn infants identified by prenatal or neonatal screening, we found no evidence that prenatal treatment significantly reduced the risk of clinical manifestations (adjusted OR for treated vs not treated 1·11, 95% CI 0·61–2·02). Increasing gestational age at seroconversion was strongly associated with increased risk of mother-to-child transmission (OR 1·15, 95% CI 1·12–1·17) and decreased risk of intracranial lesions (0·91, 0·87–0·95), but not with eye lesions (0·97, 0·93–1·00).

Interpretation We found weak evidence for an association between early treatment and reduced risk of congenital toxoplasmosis. Further evidence from observational studies is unlikely to change these results and would not distinguish whether the association is due to treatment or to biases caused by confounding. Only a large randomised controlled clinical trial would provide clinicians and patients with valid evidence of the potential benefit of prenatal

Lancet 2007; 369: 115–22

*Members listed at end of report

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PLoS MEDICINE

Prenatal Treatment for Serious Neurological Sequelae of Congenital Toxoplasmosis: An Observational Prospective Cohort Study

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Abstract

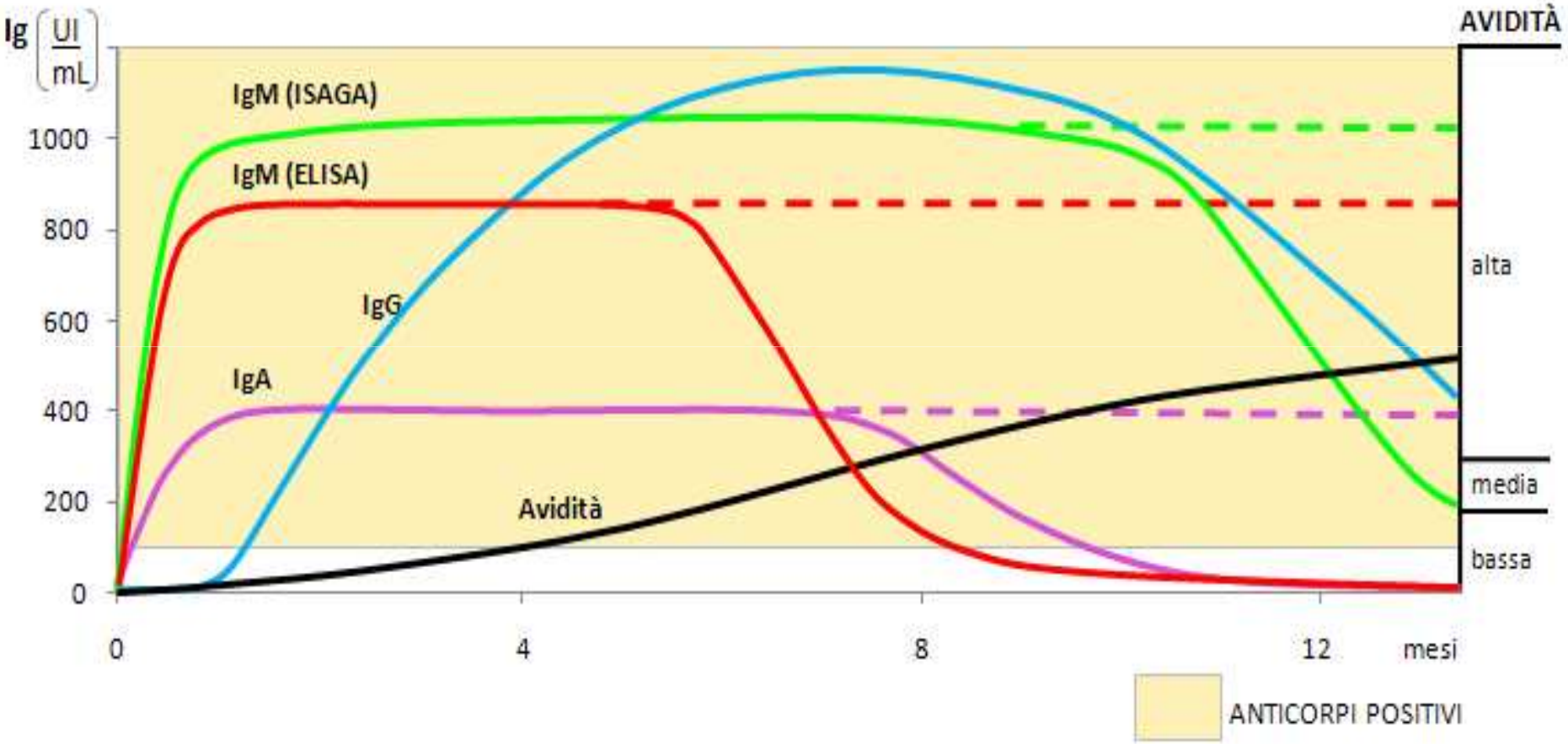
Background: The effectiveness of prenatal treatment to prevent serious neurological sequelae (SNSD) of congenital toxoplasmosis is not known.

Methods and Findings: Congenital toxoplasmosis was prospectively identified by universal prenatal or neonatal screening in 14 European centres and children were followed for a median of 4 years. We evaluated determinants of postnatal death or SNSD defined by one or more of functional neurological abnormalities, severe bilateral visual impairment, or pregnancy termination for confirmed congenital toxoplasmosis. Two-thirds of the cohort received prenatal treatment (189/293; 65%). 23/293 (8%) fetuses developed SNSD of which nine were pregnancy terminations. Prenatal treatment reduced the risk of SNSD. The odds ratio for prenatal treatment, adjusted for gestational age at maternal seroconversion, was 0.24 (95% Bayesian credible intervals 0.07–0.71). This effect was robust to most sensitivity analyses. The number of infected fetuses needed to be treated to prevent one case of SNSD was three (95% Bayesian credible intervals 2–15) after maternal seroconversion at 10 weeks, and 18 (9–75) at 30 weeks of gestation. Pyrimethamine-sulphonamide treatment did not reduce SNSD compared with spiramycin alone (adjusted odds ratio 0.78, 0.21–2.95). The proportion of live-born infants with intracranial lesions detected postnatally who developed SNSD was 31.0% (17.0%–38.1%).

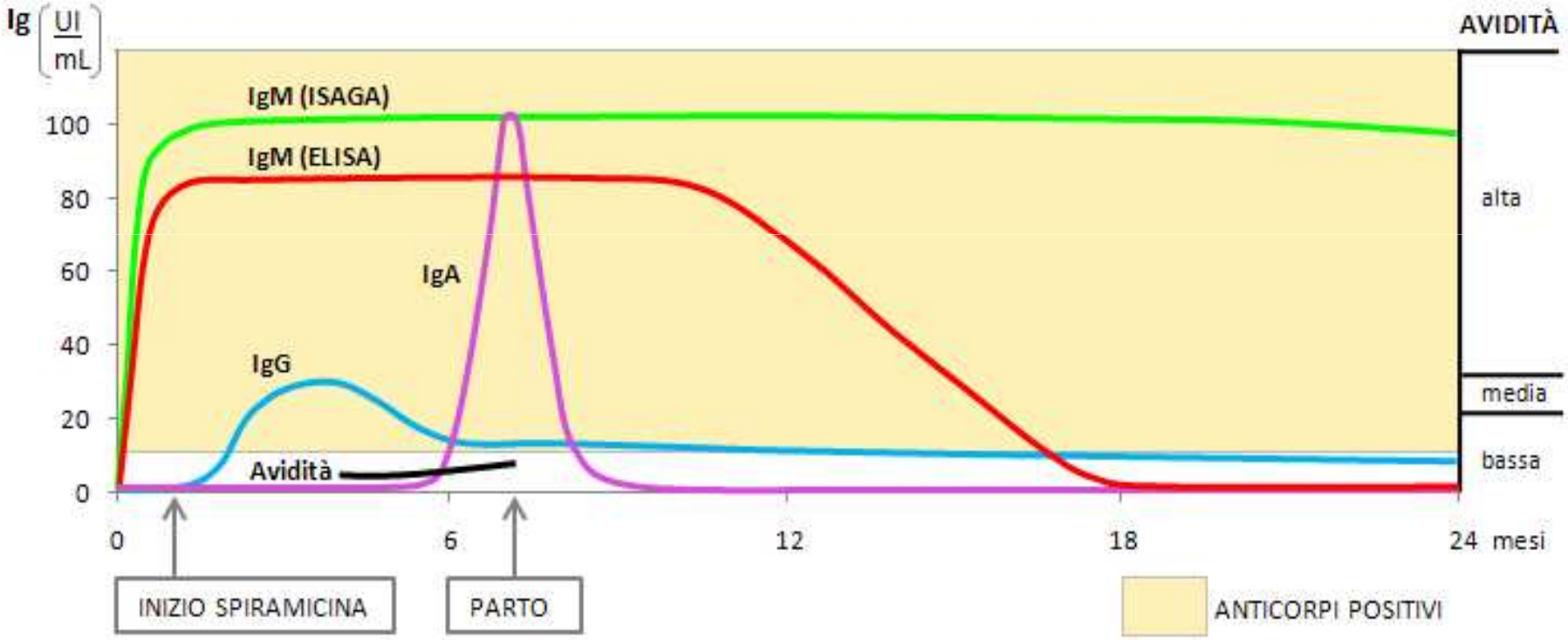
Conclusion: The finding that prenatal treatment reduced the risk of SNSD in infected fetuses should be interpreted with caution because of the low number of SNSD cases and uncertainty about the timing of maternal seroconversion. As these are observational data, policy decisions about screening require further evidence from a randomized trial of prenatal screening and from cost-effectiveness analyses that take into account the incidence and prevalence of maternal infection.

Please see later in the article for the Editors' Summary.

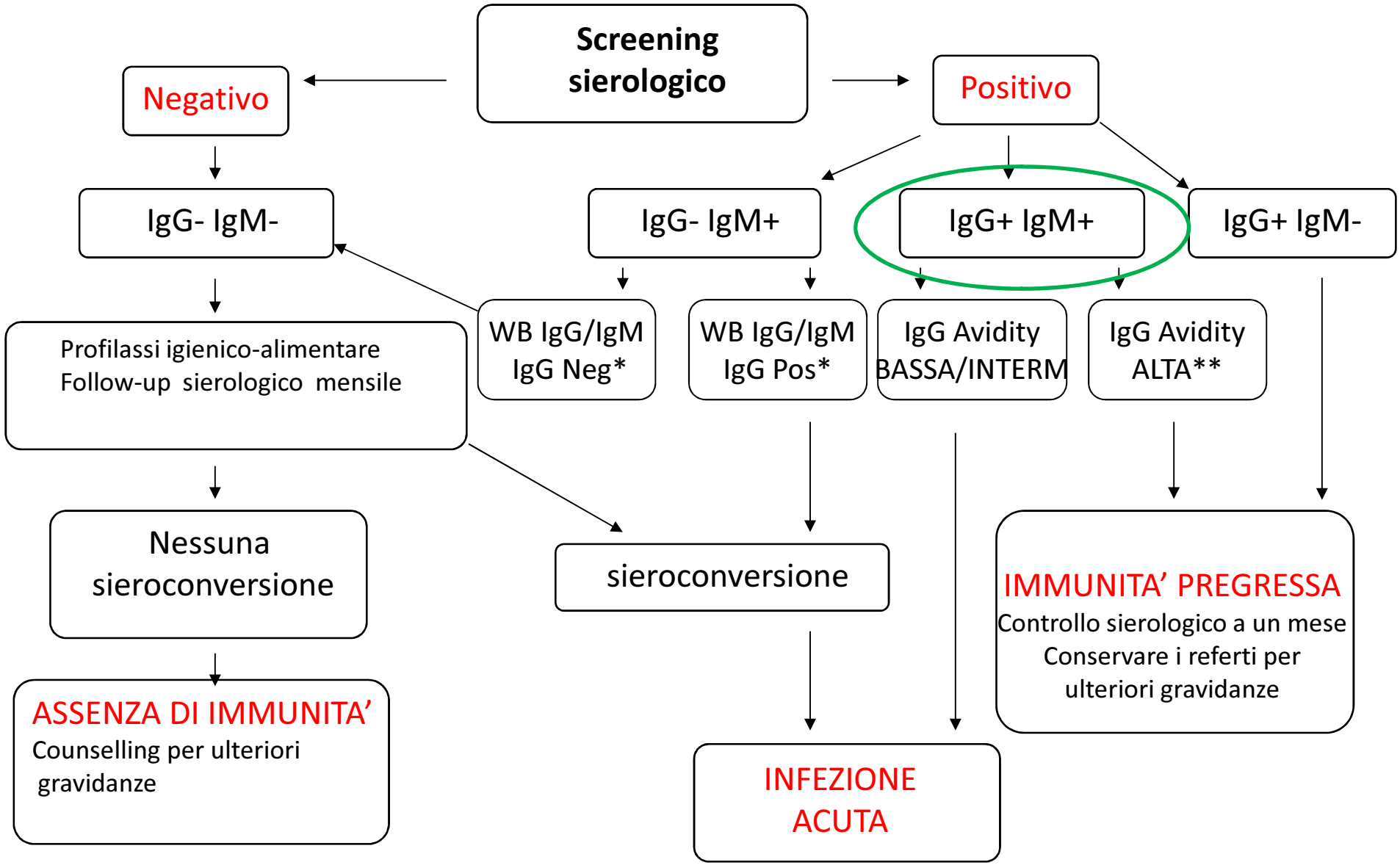
Cinetica anticorpale in un paziente non trattato



Cinetica anticorpale in una gravida trattata



Diagnosi della toxoplasmosi in gravidanza



* Nei successivi controlli settimanali in assenza di terapia

** Se il test viene eseguito nel primo trimestre di gravidanza

Maturazione dell' Indice di Avidità in 28 gravide trattate (122campioni) e in 16 linfoadeniti non trattate (51 campioni)

Fig. 1 a

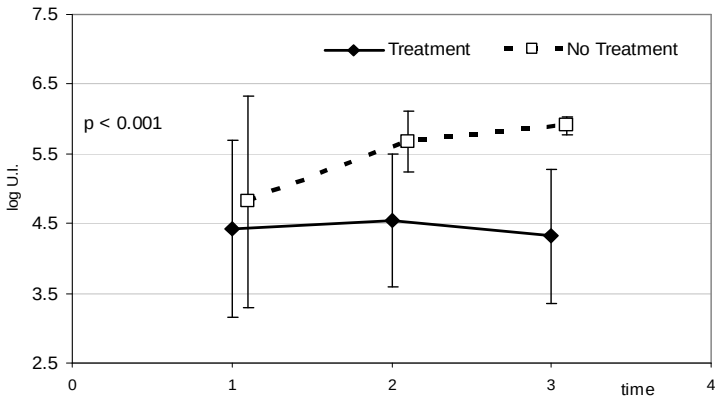


Fig. 1 b

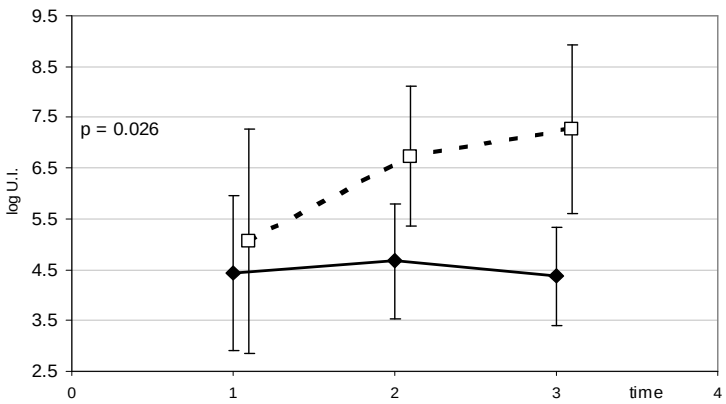


Fig. 1 c

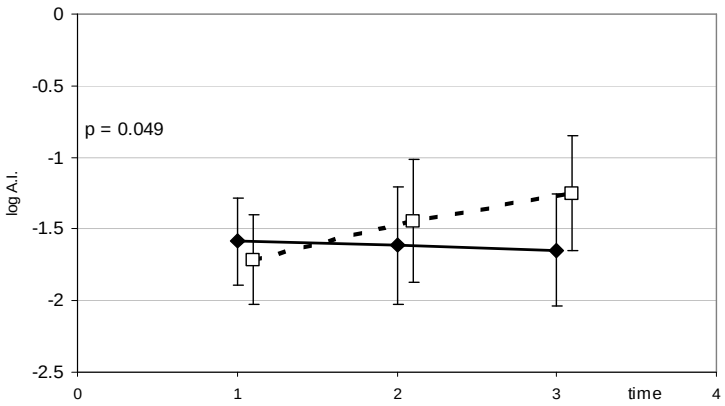
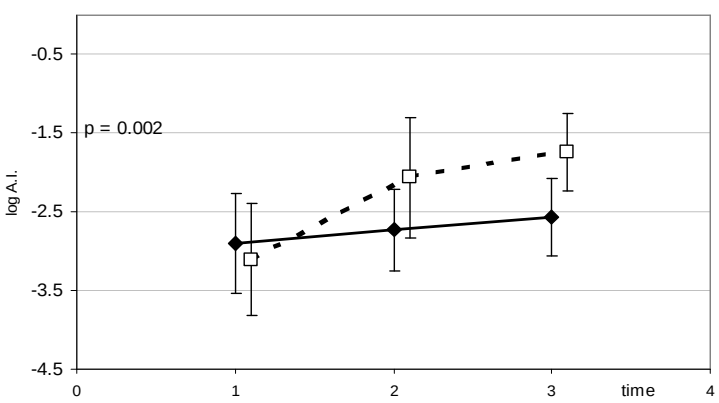
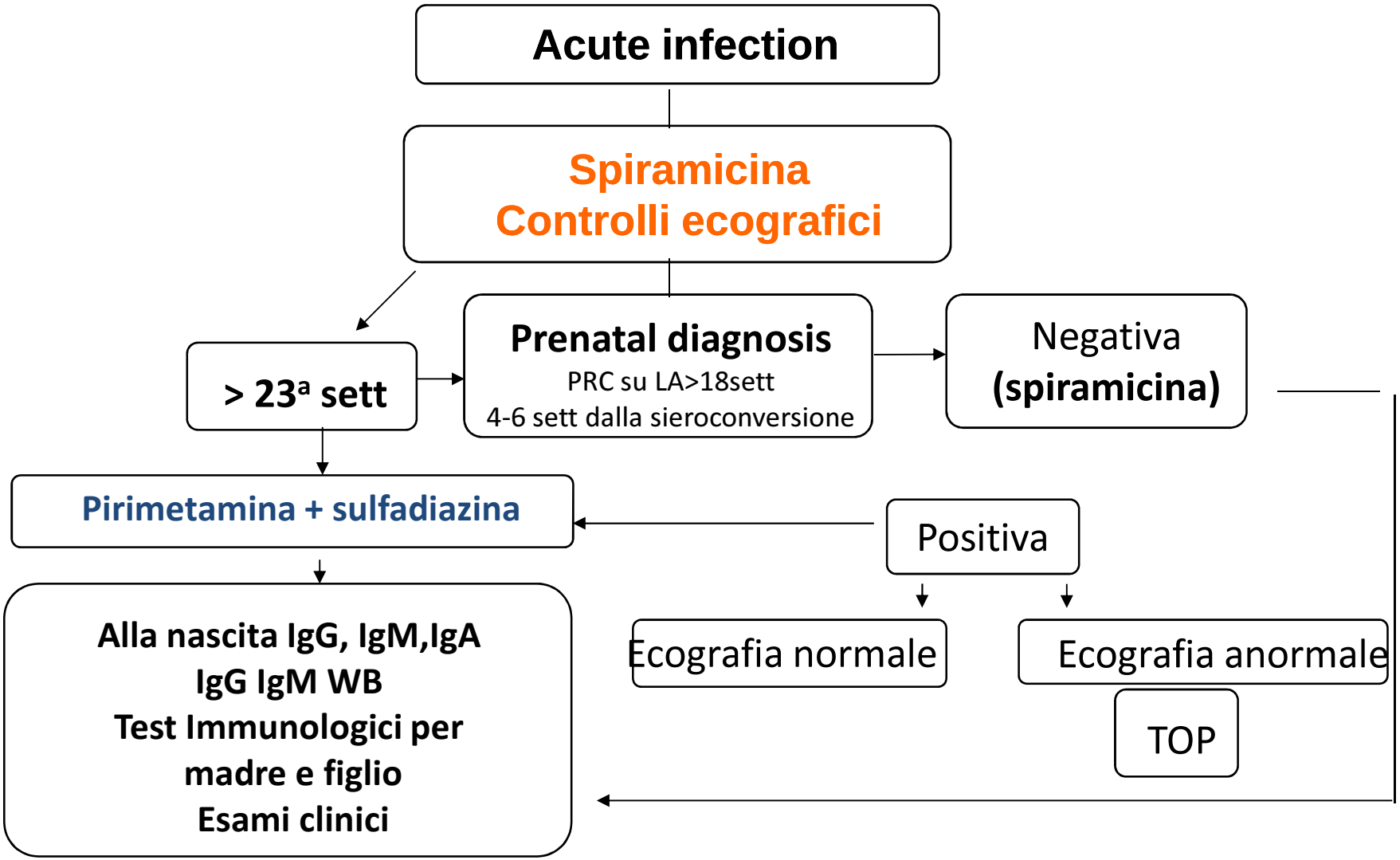


Fig. 1 d



Diagnosi della toxoplasmosi nel feto



Trimestre Di Sieroconversione	N°	CT+ PCR		CT- PCR		Sensibility	Specificity
		+	-	+	-		
I	357	3	6	1	347	0.33	0.99
II	200	37	9	5	149	0.80	0.98
III	36	17	8	1	10	0.68	0.91
Tot	593	57	23	7	506	0.71	0.98

L. Thalib et al, BJOG, May 2005

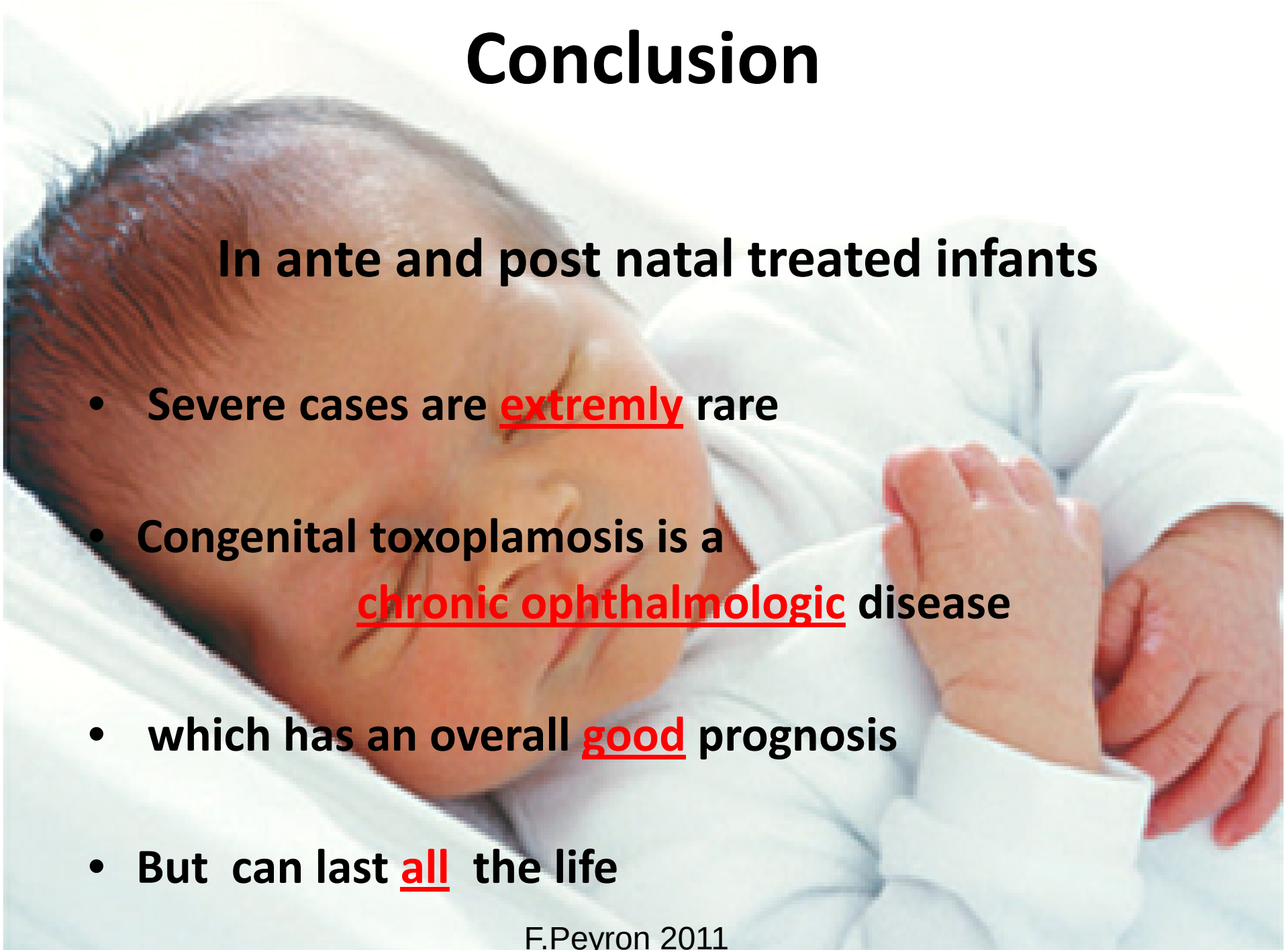
	First Trimester	Second Trimester	Third Trimester	Total
Sensitivity	75 (19–99)	97 (83–99.9)	88 (67–98.5)	92.2 (81–98)
Specificity	100 (97–100)	100 (95.4–100)	100 (66.4–100)	100 (98–100)
Positive predictive value	100 (29.2–100)	100 (88.1–100)	100 (78.2–100)	100 (92.5–100)
Negative predictive value	99 (96–99.9)	99 (93–99.9)	82 (48–98)	98.1 (95–99.5)

No false +
Rare false -

Table 2. Characteristics of the Four Infected Children With Negative Polymerase Chain Reaction Results

Case	Seroconversion	Spiramycin	Amniocentesis	IgM at Birth
1	13	15.5	18	+
2	20	26	29	+
3	28	30.5	34	+
4	32	36	40	+

Conclusion



In ante and post natal treated infants

- **Severe cases are extremly rare**
- **Congenital toxoplamosis is a chronic ophthalmologic disease**
- **which has an overall good prognosis**
- **But can last all the life**