

Prima Giornata Fiorentina dedicata ai pazienti con malattie mieloproliferative croniche



Venerdì 15 aprile 2011

I nuovi farmaci per la mielofibrosi

Giovanni Barosi

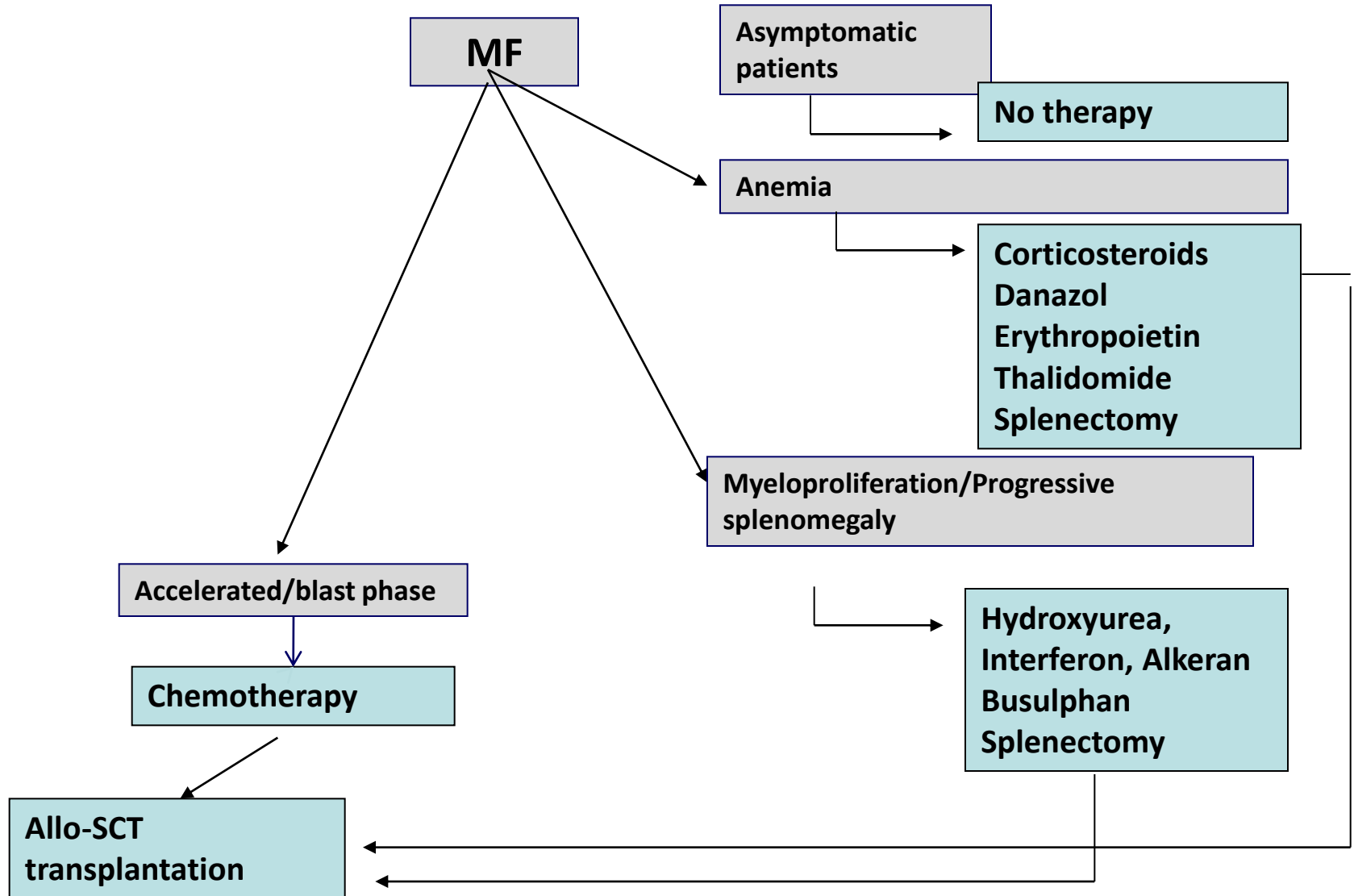
**Laboratorio di Epidemiologia Clinica (Centro per lo
Studio della Mielofibrosi.**

Fondazione IRCCS Policlinico S.Matteo, Pavia

I problemi clinici rilevanti della mielofibrosi

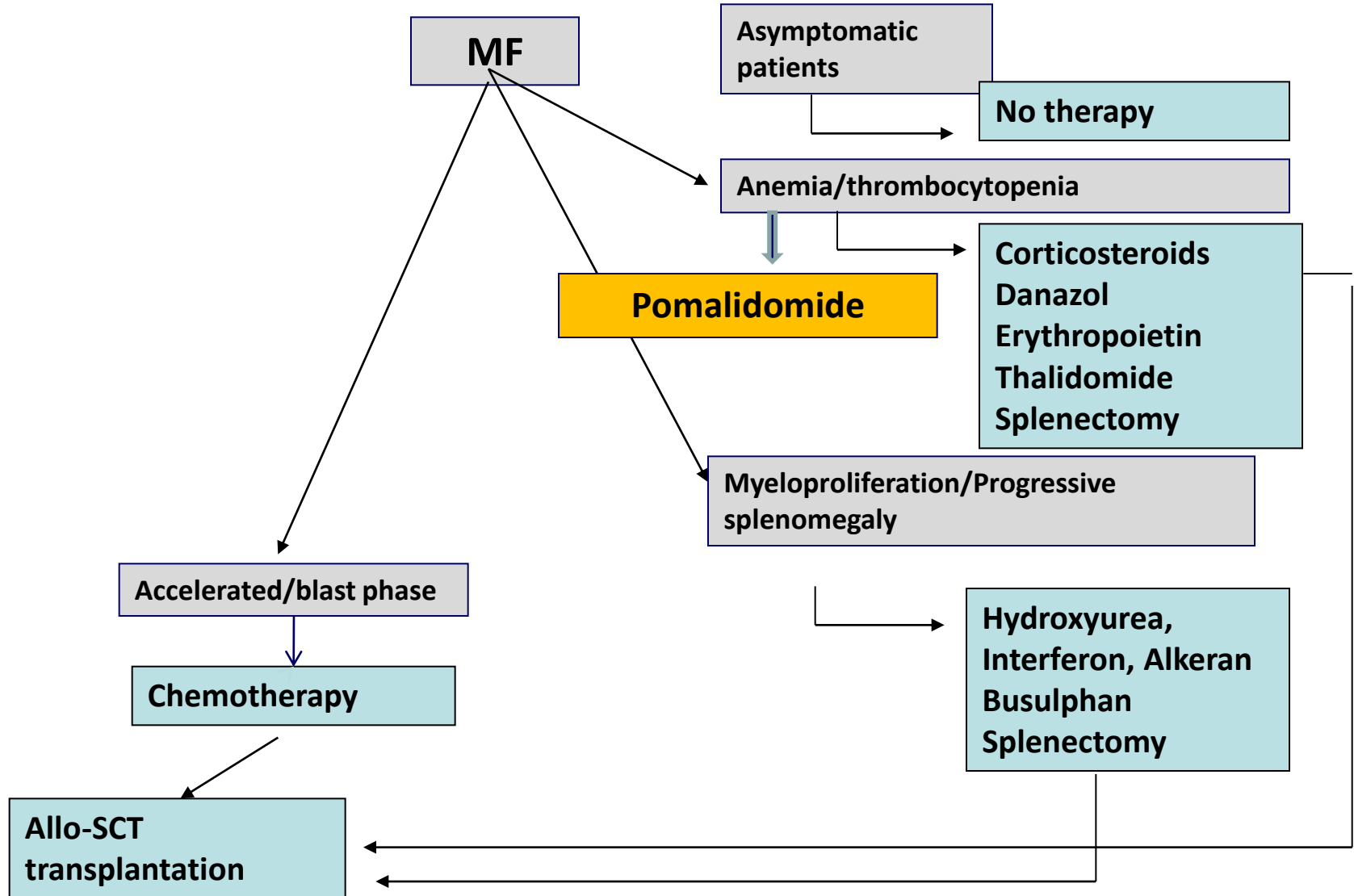
1. Anemia
2. Splenomegalia progressiva e sintomatica
3. Accelerazione della malattia (aumento delle cellule immature nel sangue, deterioramento delle condizioni fisiche)

Terapia della mielofibrosi

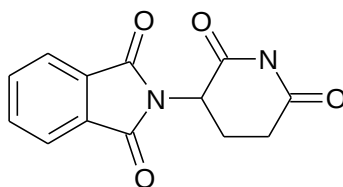


Nuove terapie nella mielofibrosi.

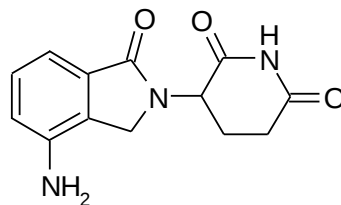
Pomalidomide



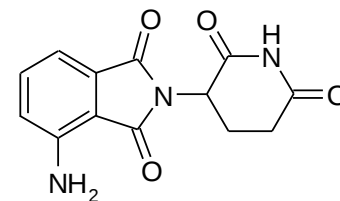
IMiDs In-vitro Pharmacology



Thalidomide



Lenalidomide



Pomalidomide

- **Anti-angiogenic activity**

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- **(human explant model)**

- **Anti-inflammatory activity**

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- **T cell/NK cell costimulation**

+

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- **Anti-proliferative activity**

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+ / ++

+++

- **Pro-erythroid activity**

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Gli studi fatti

Pomalidomide in MF

(CC4047-001)

- **Background:** Pomalidomide (CC-4047, Actimid, *Celgene*) is a second generation antiangiogenic, immunomodulatory thalidomide analog with a superior toxicity and activity profile

- **Design:** Phase-2 Randomized, Multicenter, Double-blind, Active-control, Parallel-group Study

- **Sites:** USA, Europe

- **Start of enrollment:** January 07

- **End of enrollement:** May 08

- **Enrolled patients:** 84

CC-4047 (2 mg)

CC-4047 (2 mg) +
prednisone

CC-4047 (0.5 mg) +
prednisone

prednisone

Response rate (IWG-RT)

Treatment arm	Response on anemia among all 84 patients	Response on anemia among 62 patients who completed 3 cycles of treatment
Pomalidomide (2 mg/day) + placebo	23% (5 of 22)	38% (5 of 13)
Pomalidomide (2 mg/day) + prednisone	16% (3 of 19)	23% (3 of 13)
Pomalidomide (0.5 mg/day)	36% (8 of 22)	40% (8 of 20)
Prednisone	19% (4 of 21)	25% (4 of 16)

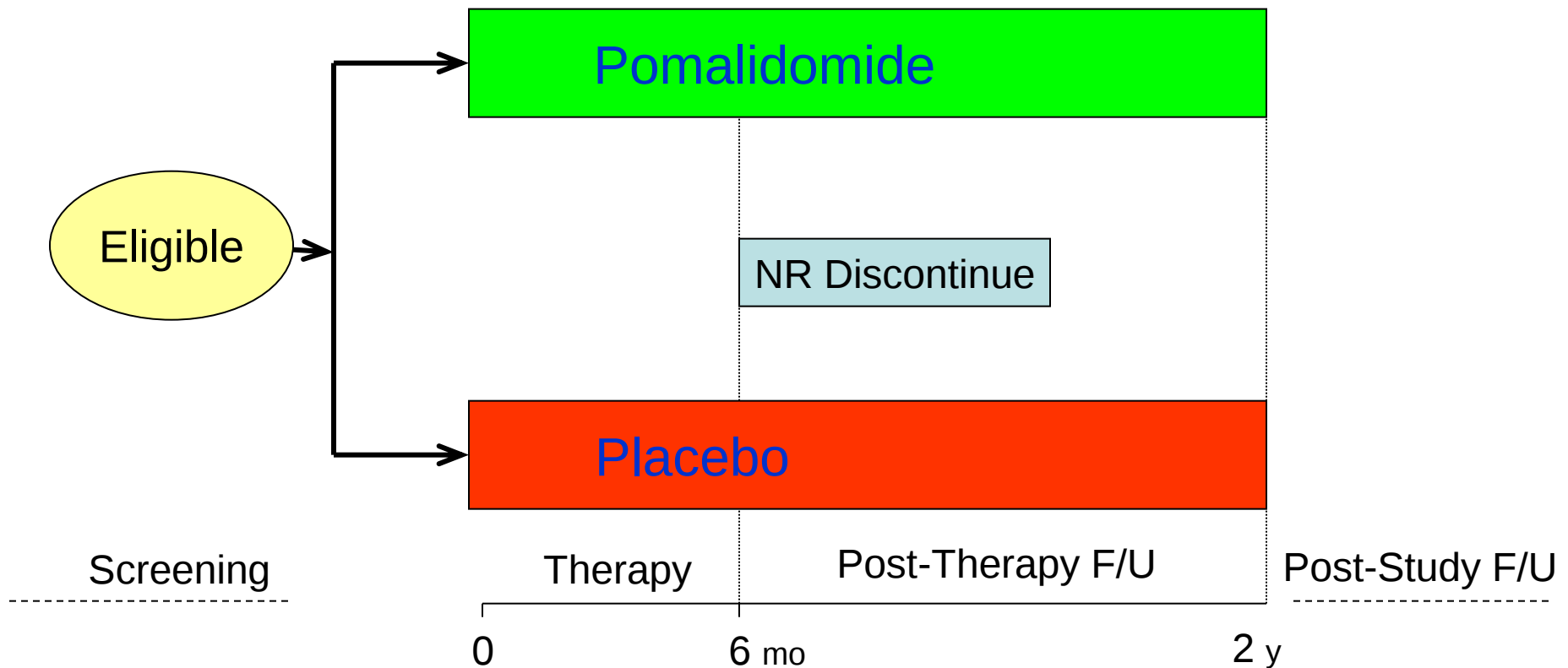
Grade 3-4 toxicities

Treatment arm	Neutropenia	Thrombocytopenia	Thrombosis
Pomalidomide (2 mg/day) + placebo	9%	14%	9%
Pomalidomide (2 mg/day) + prednisone	16%	16%	5%
Pomalidomide (0.5 mg/day)	5%	9%	0%
Prednisone	5%	5%	0%

Gli studi in atto

CC4047-002

A phase-3, multi-center, randomized, double-blind, placebo-controlled, parallel group study to compare efficacy and safety of pomalidomide in subjects with MPN-associated MF and red blood cell-transfusion dependence



Eligibility-Criteria

- MPN-associated myelofibrosis
- Average ≥ 2 U RBC/28 days (prior 84 d)
- PMN $\geq 0.5 \times 10^9/\text{L}$
- Platelets $\geq 25 \times 10^9/\text{L}$
- Blasts $< 10\%$
- eGFR ≥ 30 ml/min
- Inappropriate: EPO, androgens, allotransplant
- No therapy within 30-86 d

Endpoints

1º

- RBC-transfusion-independence

2º

- Duration of RBC-transfusion-independence
- Time to RBC-transfusion-independence
- Survival
- Healthcare utilization
- Subject-reported outcomes

Centri Italiani

Pavia

Varese

Bergamo

Torino

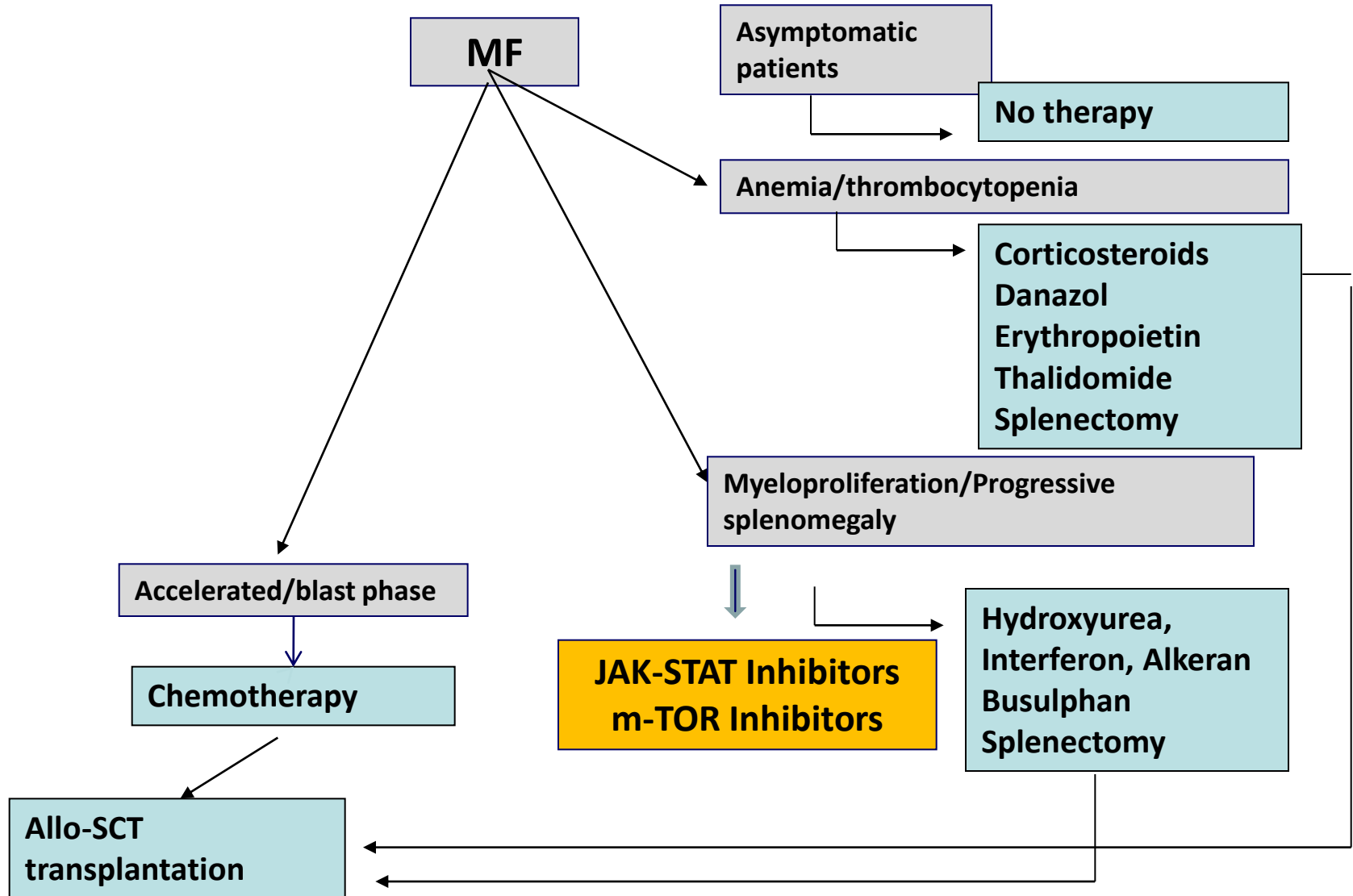
Firenze

Roma

Bari

Bologna

New Therapies in MF- Antiprolif. drugs



M-Tor Inhibitor (Everolimus, RAD001)

STUDI FATTI



15th CONGRESS
JUNE 10 - 13, 2010
BARCELONA

EVIDENCE OF EFFICACY OF RAD001, AN INHIBITOR OF mTOR, IN A PHASE I/II STUDY IN PRIMARY MYELOFIBROSIS AND POST POLYCYTHEMIA VERA/ESSENTIAL THROMBOCYTHEMIA MYELOFIBROSIS

**AM Vannucchi, P Guglielmelli, L Lupo, MC Finazzi, L. Tozzi, F.
Biamonte, E Antonioli, C Bogani, L Pieri, E Gattoni, A Masciulli, S
Paratore, MC Susini, G Finazzi, R Marchioli, A Rambaldi, T Barbui,
A Bosi, G Barosi**

Division of Hematology, University of Florence; Centre for
Myelofibrosis, IRCCS San Matteo, Pavia; Ospedali Riuniti di
Bergamo; Mario Negri Sud Inst, Chieti; Italy

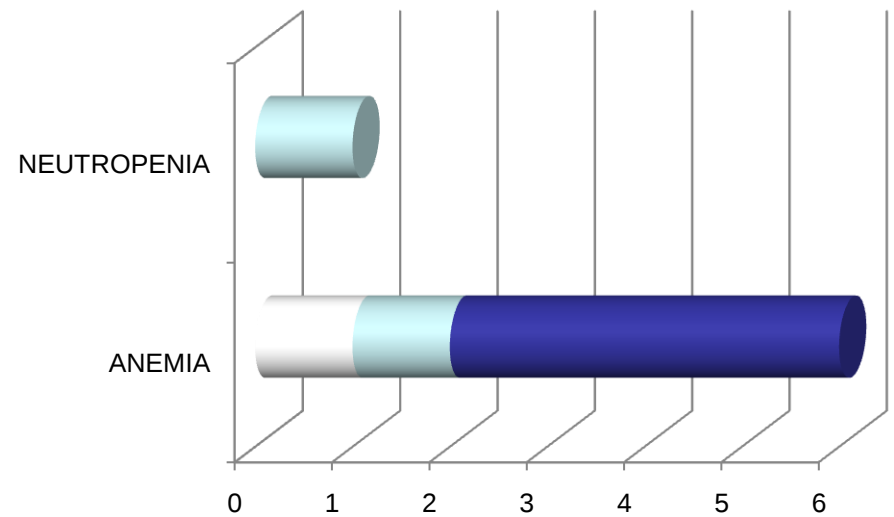
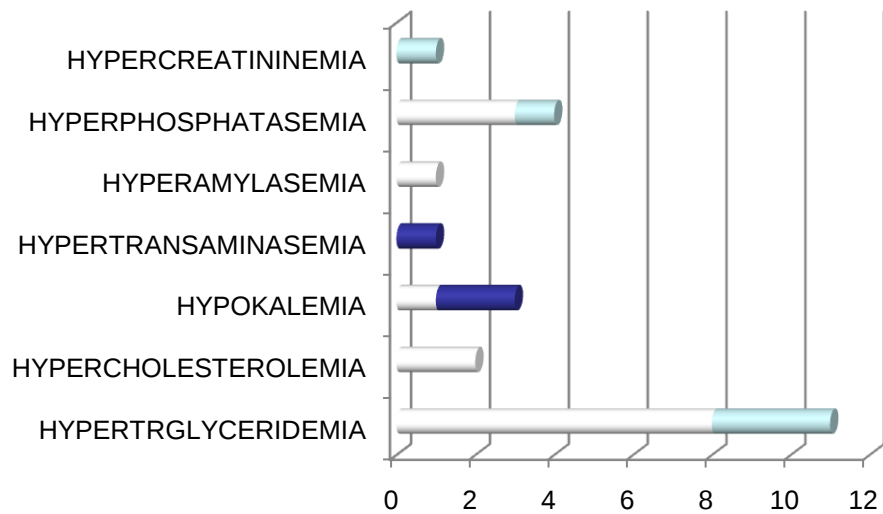
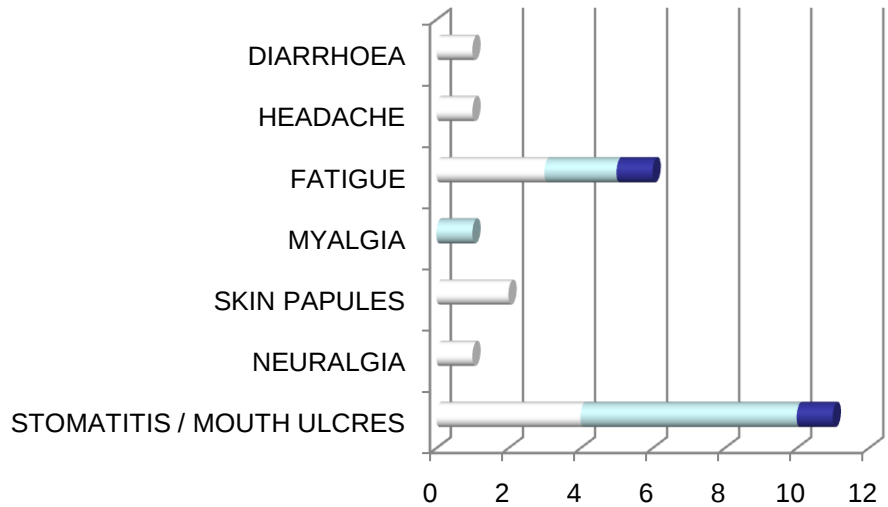
Trial information

- A non-sponsored, investigator-initiated trial
- Non-randomized, open-label phase I/II study
- Phase II two-stage design according to Simon's
- Supported by Agenzia Italiana per il Farmaco (AIFA)
- Drug provided at no cost from Novartis

RAD001 (Everolimus): Results

- Evaluable patients (Intention to treat): 25
- Response on anemia: 25% (partial)
- Response on splenomegaly: 43% (complete and partial)
- Response on constitutional symptoms: 69%
- Response on pruritus: 80%
- EUMNET responders: 60% (27% major responses)
- No difference between JAK2 V617F mutated and non mutated patients

AE



Studi aperti

- Nessuno studio aperto
- Il farmaco è disponibile ad uso compassionevole da Novartis

