

# **Die lokalisierte GIST-Erkrankung, Rückfall-(Rezidiv)-Risiko und adjuvante (unterstützende) Imatinib-Therapie**

**PD Dr. Peter Reichardt**

**Helios Klinikum Berlin-Buch**

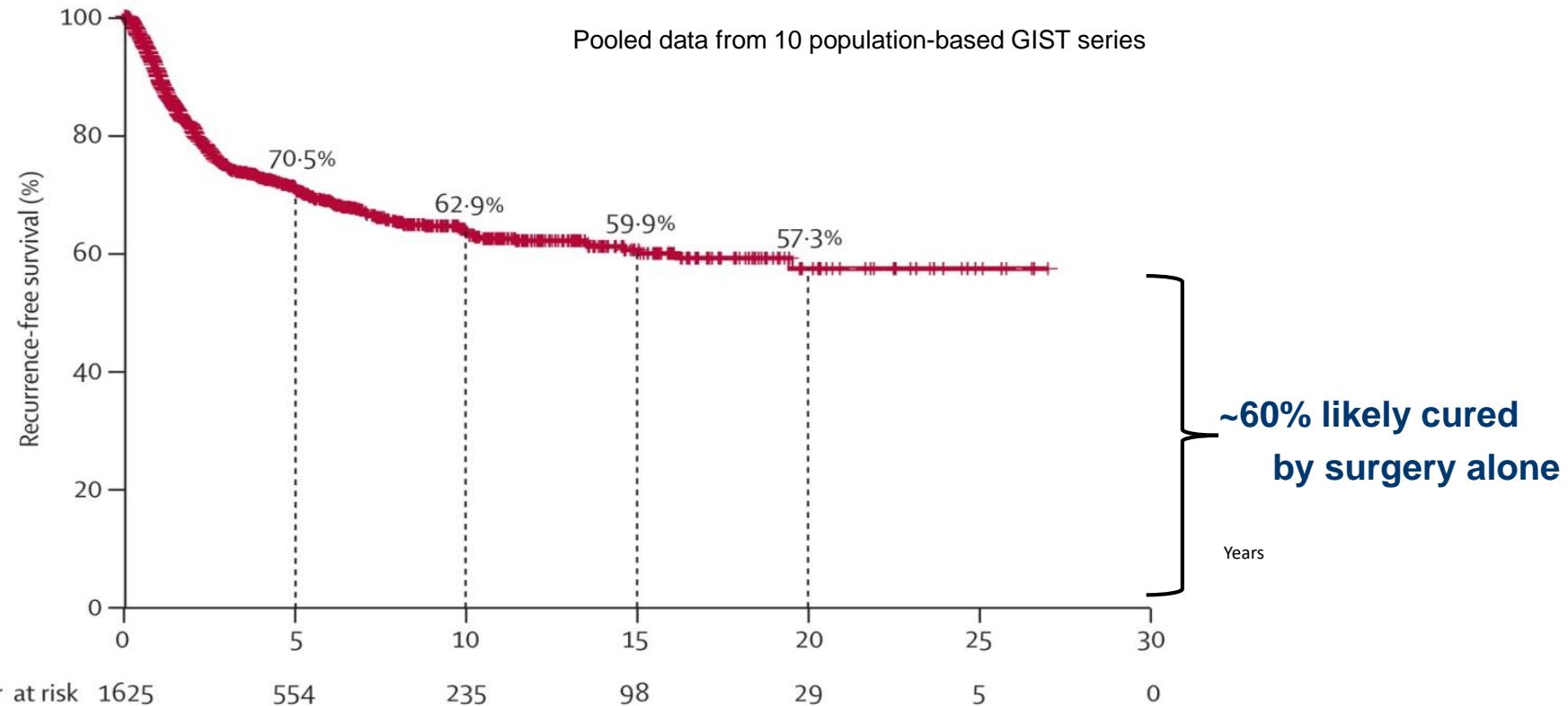
**Klinik für Onkologie und Palliativmedizin, Sarkomzentrum**



## GIST: Lokaltherapie

- Tumoren >2 cm: Biopsie / Excision (Rektum: immer)
- lokalisierte GIST: vollständige chirurgische Entfernung
- präoperative systemische Therapie zur Vermeidung mutilierender Operationen (Mutationsanalyse obligat)

## Risk of recurrence after surgery alone



## AFIP Risk Group Classification

Group	Group definition	Patients with progressive disease during long-term follow-up			
		Gastric %	Jejunal %	Duodenal %	Rectal %
1	<2.0 cm, <5/50 HPF	0	0	0	0
2	2.1-5.0 cm, <5/50 HPF	1.9	4.3	8.3	8.5
3a	5.1-10.0 cm, <5/50 HPF	3.6	24	34*	57*
3b	>10.0 cm, <5/50 HPF	12	52		
4	<2.0 cm, >5/50 HPF	0*	50*	-	54
5	2.1-5.0 cm, >5/50 HPF	16	73	50	52
6a	5.1-10.0 cm, >5/50 HPF	55	85	86*	71*
6b	>10.0 cm >5/50 HPF	86	90		

\*very low numbers

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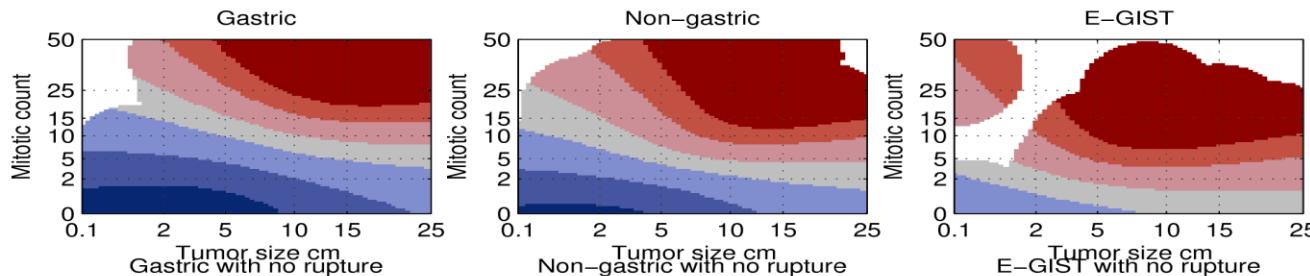
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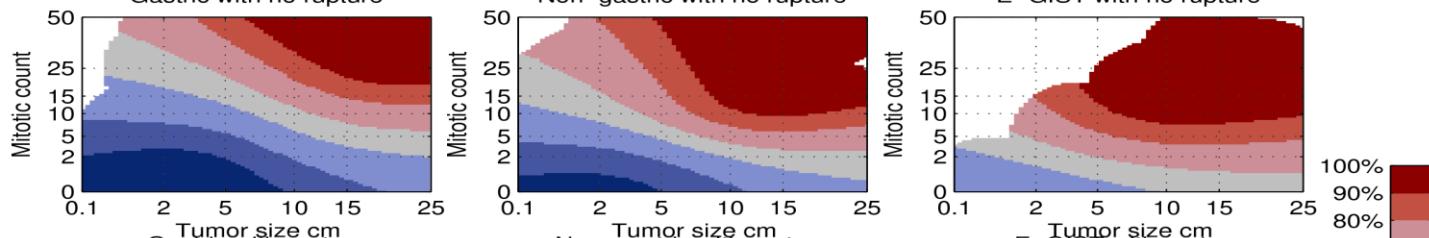
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## Prognostic contour maps, 10-year RFS

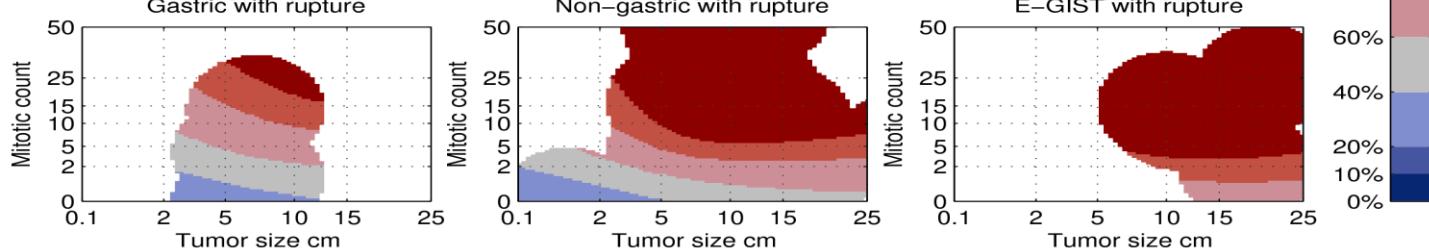
Rupture?



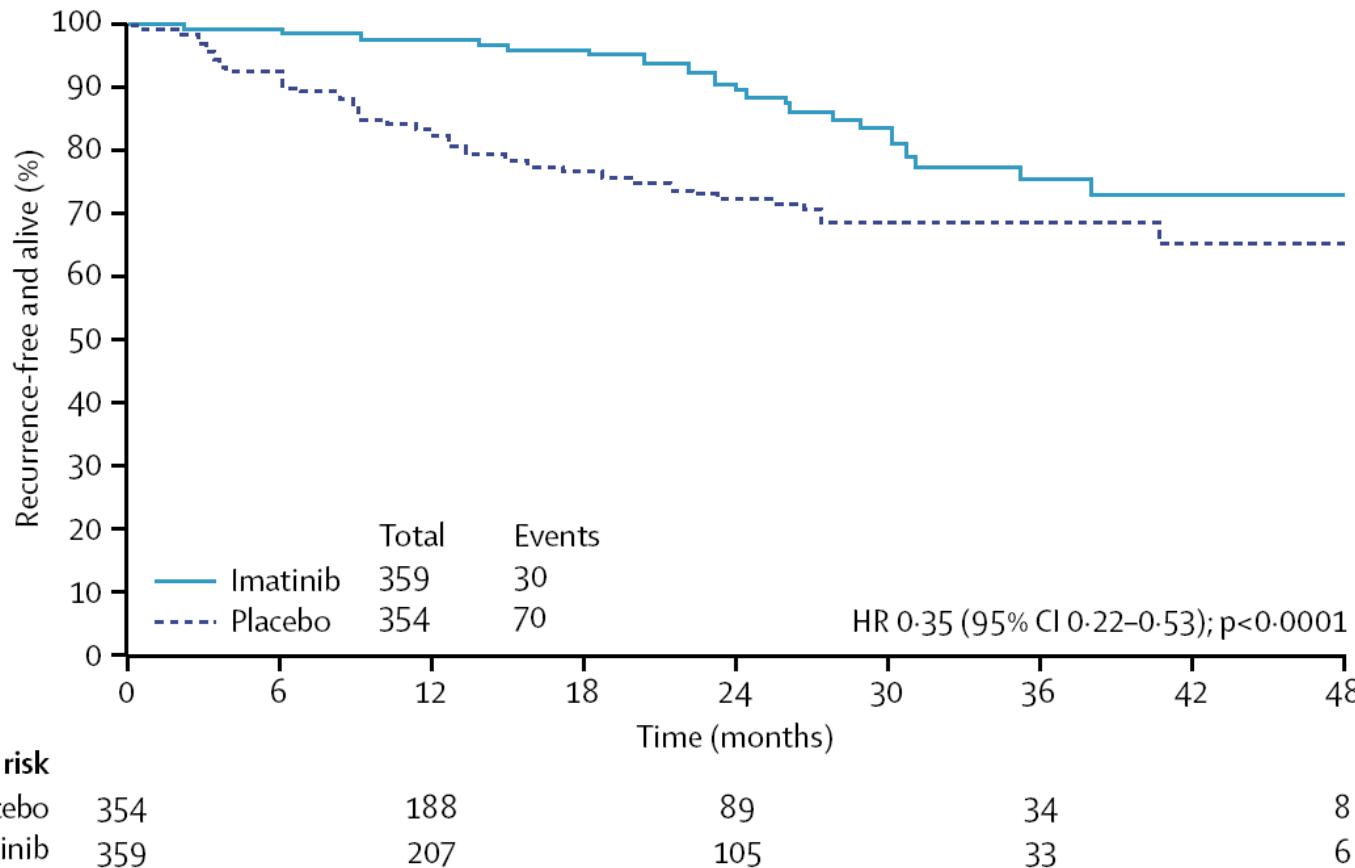
No rupture



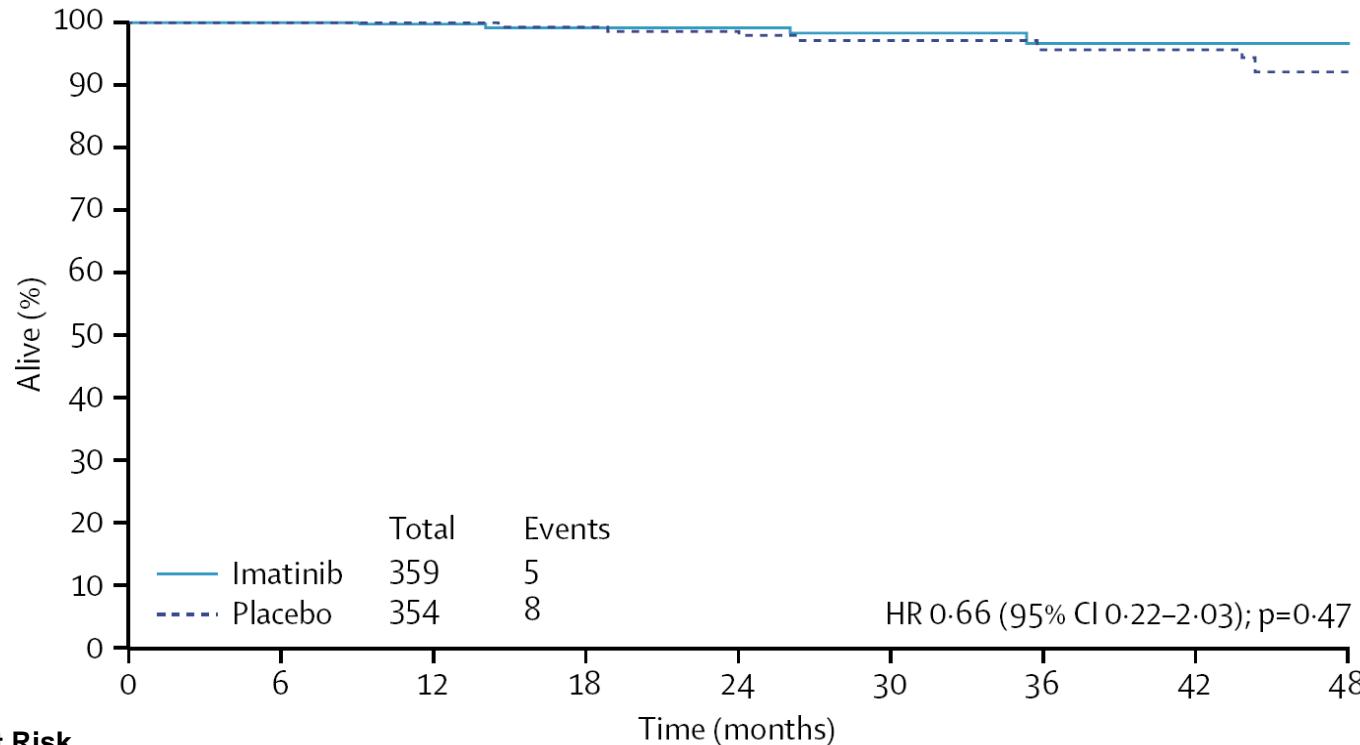
Rupture present



## Z9001: Recurrence-Free Survival



## Z9001: Overall Survival



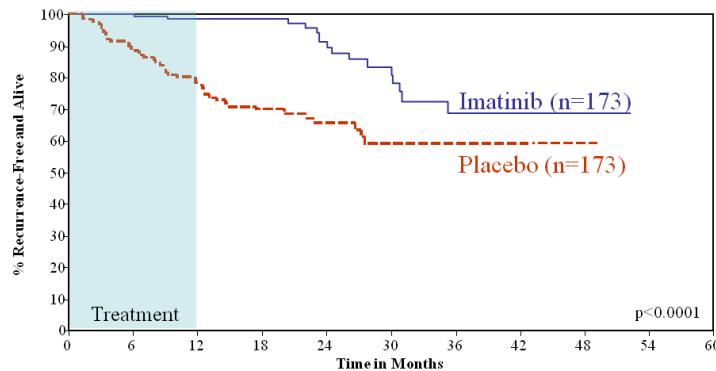
### Number at Risk

Placebo	354	241	151	58	15
Imatinib	359	226	137	51	15

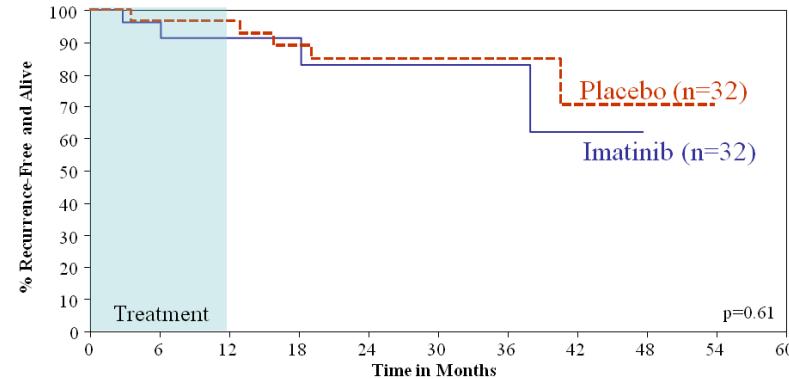
DeMatteo et al. Lancet. 2009;373:1097-1104.

## Influence of mutational status on outcome of adjuvant imatinib

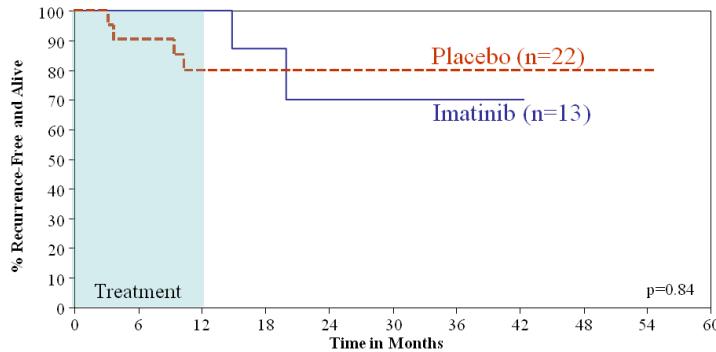
### RFS for Exon 11



### RFS for Wildtype

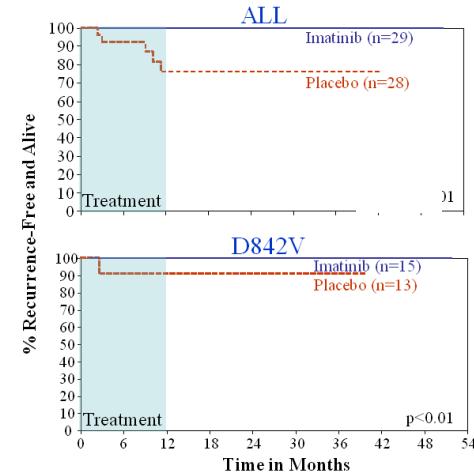


### RFS for Exon 9



Corless CL et al. JCO 2010; 28(15s): suppl; abstract 10006.

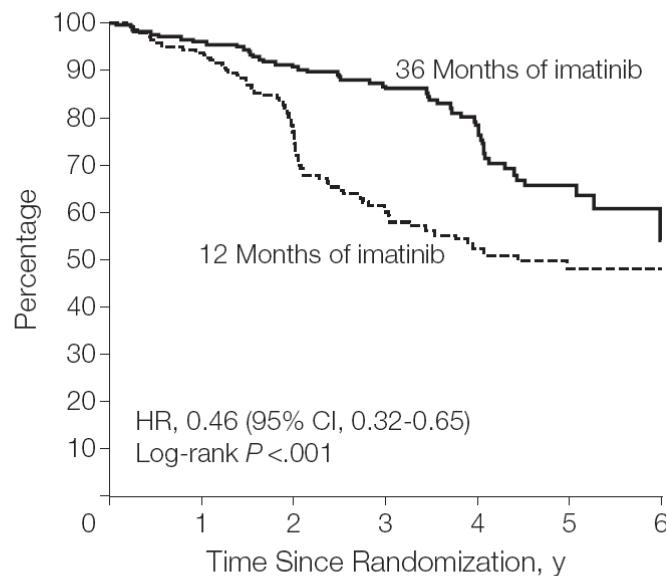
### RFS for PDGFRA



Corless CL et al. JCO 2010; 28(15s): suppl; abstract 10006.

## SSGXVIII/AIO: RFS and OS

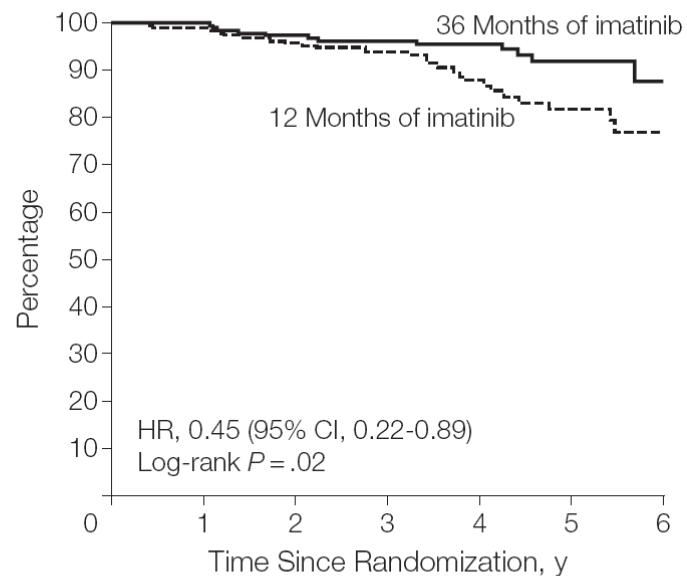
A Recurrence-free survival: intention-to-treat population



No. of patients

36 Months of imatinib	198	184	173	133	82	39	8
12 Months of imatinib	199	177	137	88	49	27	10

C Overall survival: intention-to-treat population



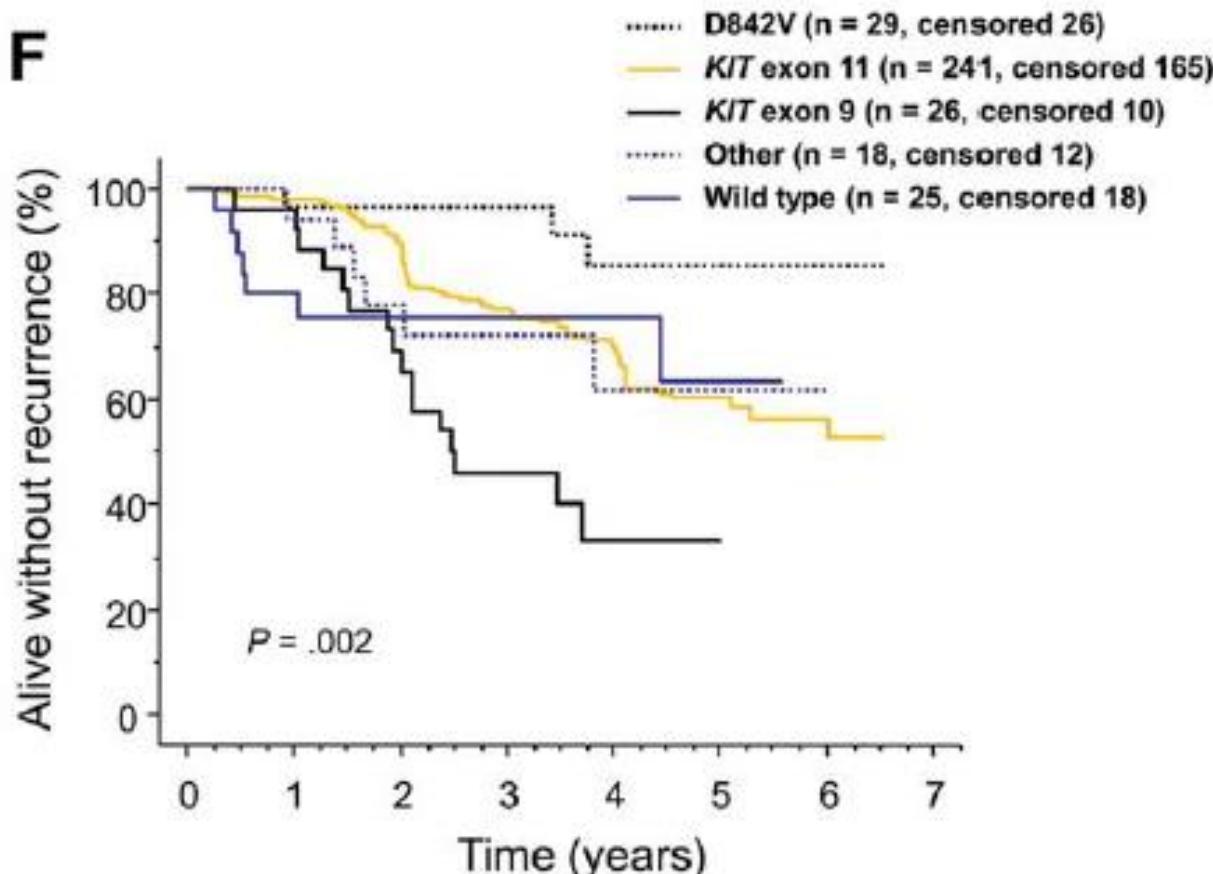
No. of patients

36 Months of imatinib	198	192	184	152	100	56	13
12 Months of imatinib	199	188	176	140	87	46	20

## Risk Factors for Gastrointestinal Stromal Tumor Recurrence in Patients Treated With Adjuvant Imatinib

Heikki Joensuu, MD<sup>1</sup>; Mikael Eriksson, MD<sup>2</sup>; Kirsten Sundby Hall, MD<sup>3</sup>; Jörg T. Hartmann, MD<sup>4</sup>; Daniel Pink, MD<sup>5</sup>; Jochen Schütte, MD<sup>6</sup>; Giuliano Ramadori, MD<sup>7</sup>; Peter Hohenberger, MD<sup>8</sup>; Justus Duyster, MD<sup>9</sup>; Salah-Eddin Al-Batran, MD<sup>10</sup>; Marcus Schlemmer, MD<sup>11</sup>; Sebastian Bauer, MD<sup>12</sup>; Eva Wardemann, MD<sup>13</sup>; Maarit Sarlomo-Rikala, MD<sup>14</sup>; Bengt Nilsson, MD<sup>15</sup>; Harri Sihto, PhD<sup>16</sup>; Karla V. Ballman, PhD<sup>17</sup>; Mika Leinonen, MSci<sup>18</sup>; Ronald P. DeMatteo, MD<sup>19</sup>; and Peter Reichardt, MD<sup>5</sup>

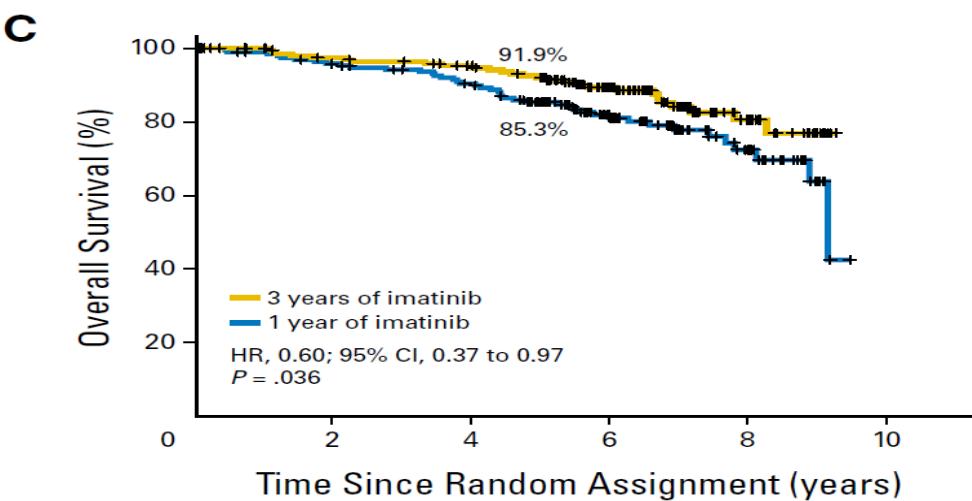
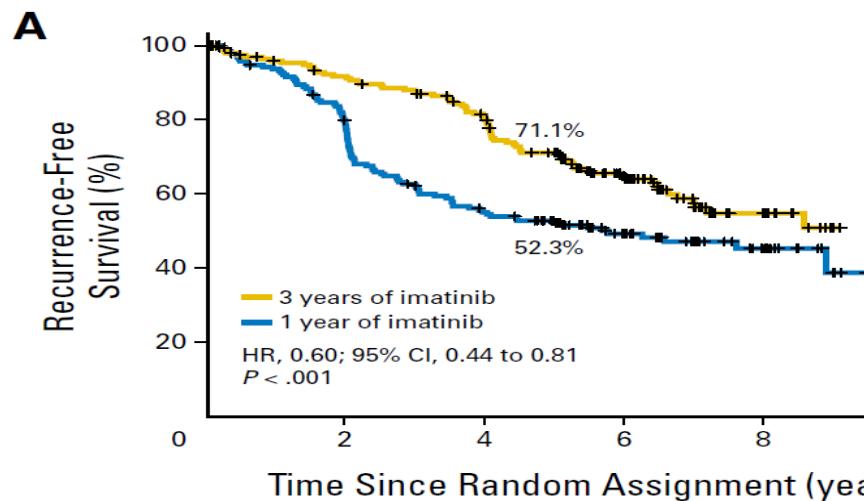
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## Adjuvant Imatinib for High-Risk GI Stromal Tumor: Analysis of a Randomized Trial

Heikki Joensuu, Mikael Eriksson, Kirsten Sundby Hall, Annette Reichardt, Jörg T. Hartmann, Daniel Pink, Giuliano Ramadori, Peter Hohenberger, Salah-Eddin Al-Batran, Marcus Schlemmer, Sebastian Bauer, Eva Wardelmann, Bengt Nilsson, Harri Sihto, Petri Bono, Raija Kallio, Jouni Junnila, Thor Alvegård, and Peter Reichardt

Recurrence-free Survival

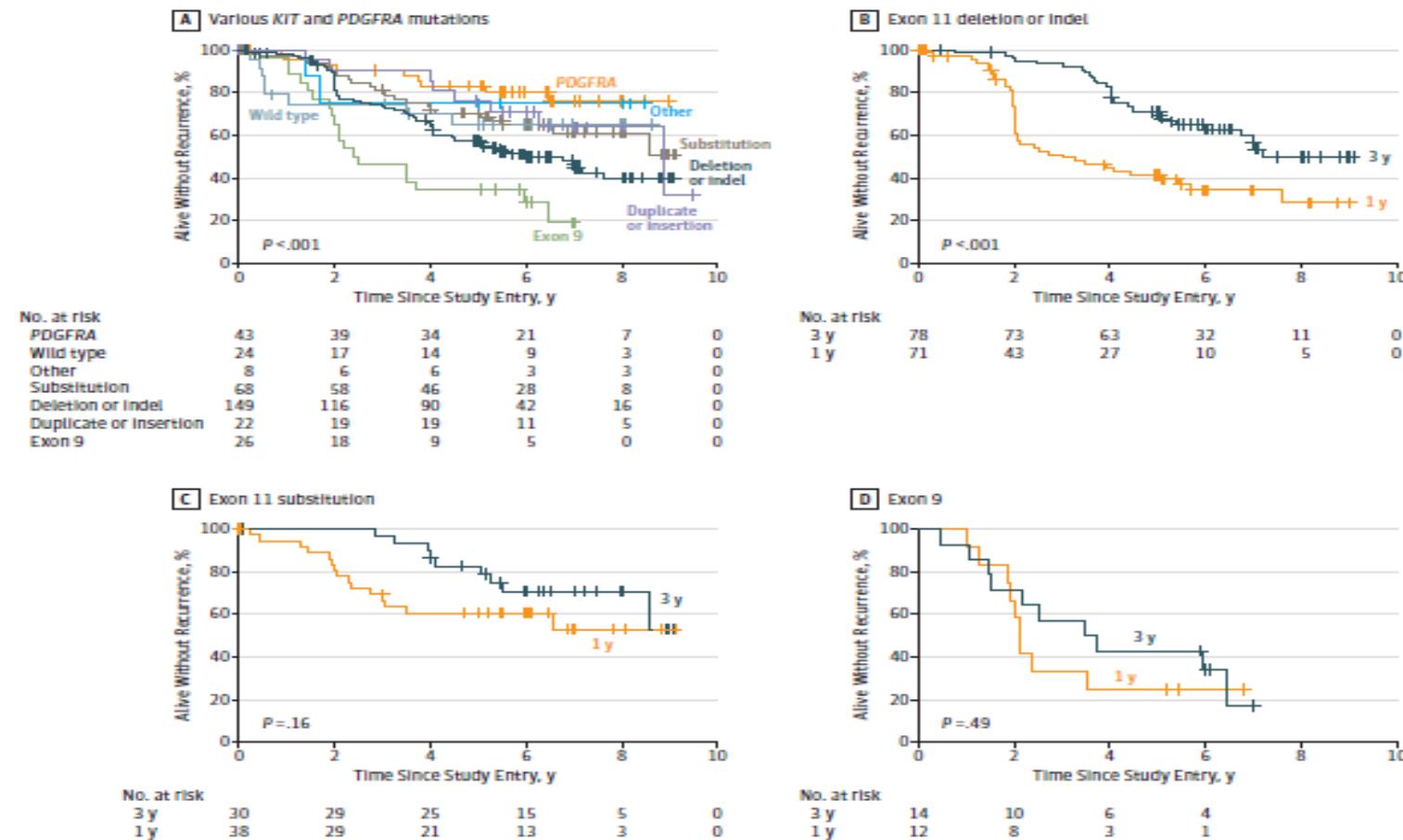


JAMA Oncology | Original Investigation

## Effect of *KIT* and *PDGFRA* Mutations on Survival in Patients With Gastrointestinal Stromal Tumors Treated With Adjuvant Imatinib

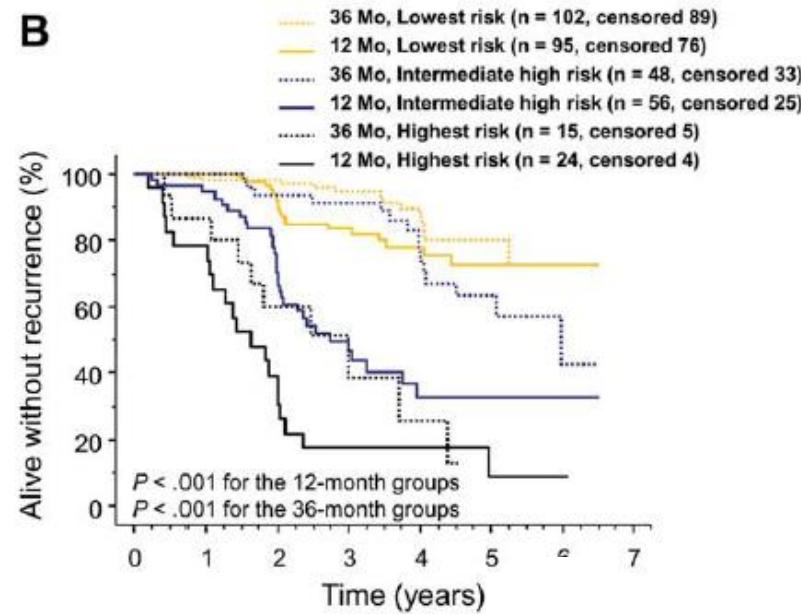
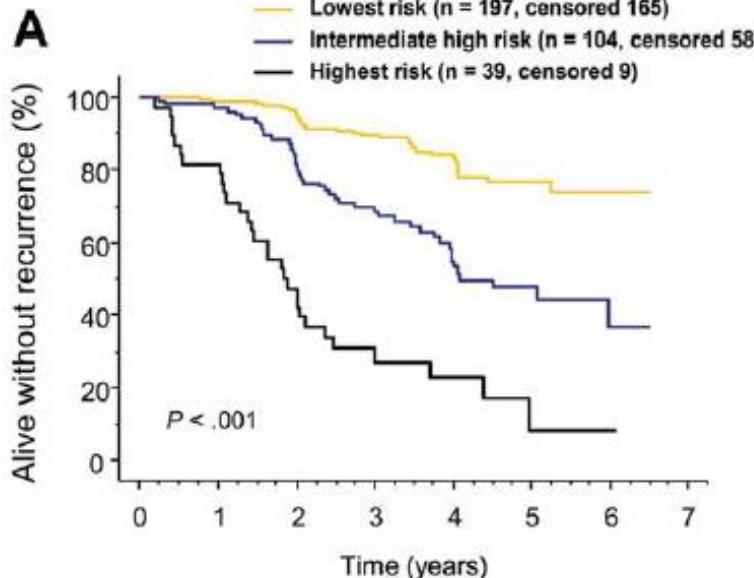
### An Exploratory Analysis of a Randomized Clinical Trial

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## Risk Factors for Gastrointestinal Stromal Tumor Recurrence in Patients Treated With Adjuvant Imatinib

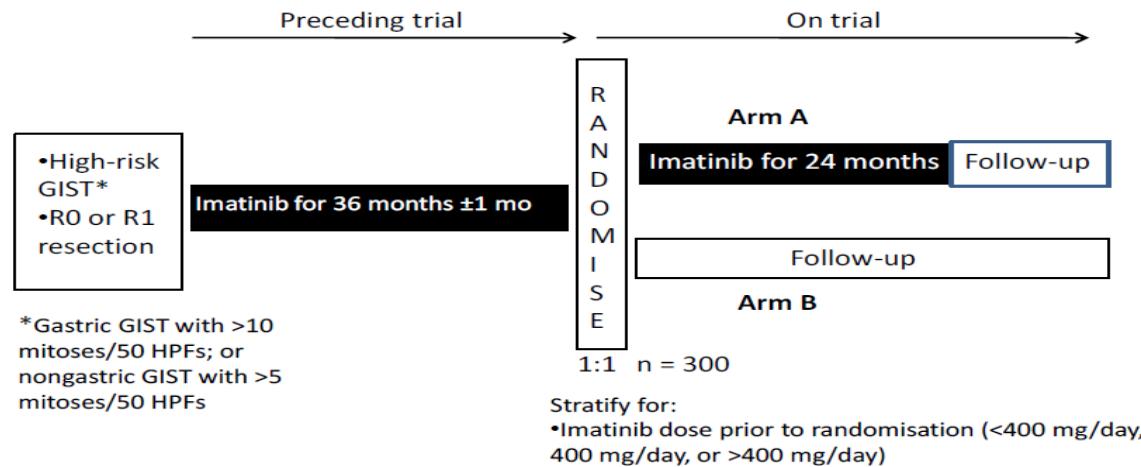
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mitoses; highest risk, gastric GIST with > 50 mitoses or non-gastric GIST with > 20 mitoses per 50 high-power fields). (B)

# Three versus five years of adjuvant imatinib as treatment of patients with operable GIST with a high risk for recurrence: A randomised phase III study

## Trial design



\*Gastric GIST with >10 mitoses/50 HPFs; or nongastric GIST with >5 mitoses/50 HPFs

NUMBER OF PATIENTS	300 patients to be randomised in 1:1 ratio, 150 to imatinib for further 24 months and 150 to stop imatinib.
RANDOMISATION	Central randomisation. At randomisation, the patients are stratified by the imatinib dose preceding randomisation (< 400 mg/day, 400 mg/day, or >400 mg/day). The centres will keep a log of patients who received the informed consent.

## Standard

- Rückfallrisiko bestimmen
- Mutationsanalyse ist Pflicht
- Imatinib für 3 Jahre bei signifikantem Rezidivrisiko
- Keine adjuvante Therapie bei niedrigem Risiko
- Keine adjuvante Therapie bei PDGFRA Exon 18 D842V
- Keine adjuvante Therapie bei Kit/PDGFRa Wildtyp



Patienten-Hilfe Sarkome



**Herzlichen Dank für  
Ihre Aufmerksamkeit!**