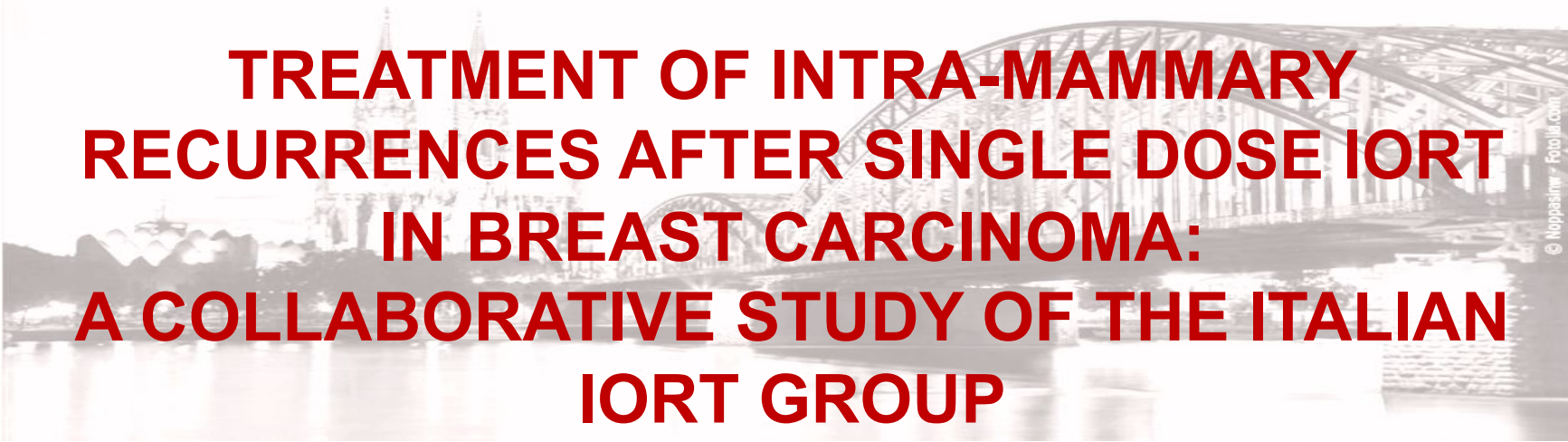


Salvage treatment of  
*in breast* recurrences  
following full dose  
IORT  
Experience from a  
multi-institutional  
series



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# TREATMENT OF INTRA-MAMMARY RECURRENCES AFTER SINGLE DOSE IORT IN BREAST CARCINOMA: A COLLABORATIVE STUDY OF THE ITALIAN IORT GROUP

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**PRESENTED ISIORT2014**

# TREATMENT OF INTRA -MAMMARY RECURRENCES AFTER SINGLE DOSE IORT IN BREAST CARCINOMA: A COLLABORATIVE STUDY OF THE ITALIAN IORT GROUP

From 2001 to 2013 **82 cases** of locoregional recurrence  
have been identified

IORT dose: 21 Gy

Mobile LINACs: all except one

Electron energies: 6 to 12 MeV

Applicator size 4 to 10 cm

Shielding plates: aluminium-lead or lead or PMMA

Thickness of irradiated breast: 1-2 cm

Median age: 69 (54-91)

### T Stage

T1mic	2
T1	1
T1a	1
T1b	16
T1c	42
T2	20

### N Stage

N0	60
N1mi	2
N1a	11
N2a	4
N3a	5

> 80 ys and/or  
contraindication  
to EBRT

Table 1  
Patients' characteristics  
Clinical

## Histology

Infiltrating ductal carcinoma	70
Infiltrating lobular carcinoma	9
Mucinous carcinoma	1
Other	2

## Grading

<b>G1</b>	<b>7</b>
<b>G2</b>	<b>42</b>
<b>G3</b>	<b>33</b>

## Margin Status

<b>Free</b>	<b>72</b>
<b>Close</b>	<b>5</b>
<b>Positive</b>	<b>4</b>
<b>Not evaluable</b>	<b>1</b>

## Receptors (E+Pg)

<b>Positive</b>	<b>58</b>
<b>Negative</b>	<b>22</b>
<b>Not evaluable</b>	<b>2</b>

Table 2  
Patients' characteristics  
Istological



Table 3 Site of recurrence

<b>Total</b>	<b>82</b>
Isolated intra-mammary recurrence	<b>76</b>
Intra-mammary and lymph nodal recurrence	<b>1</b>
Intramammary recurrence and distant metastases	<b>2</b>
Isolated lymph nodal recurrence	<b>3</b>

Table 4  
Intramammary recurrence: all

<b>Total</b>	<b>79</b>
In field 79.8%	63
Other quadrants 13.9%	11
Mixed 6.3%	5

Table 5  
Intramammary recurrence: other quadrants

<b>Total</b>	<b>16</b>
T1b	18,75%
T1c	14%
T2	30%



Inoltre delle 22 pazienti con RE negativi, 17 erano anche G3 e le uniche 2 pazienti con recidiva locale e metastasi a distanza appartenevano a questo sottogruppo (G3 e RE negativi)

# Average time to recurrence: 37 mths (range 6 – 123)

Table 6.1 Time to recurrence

Stage	Cases	Time to recurrence( mths)
T1b	16	48,06
T1c	42	37,09
RE+		42,03
RE-		28,2 shorter
G1		67
G2		41,7 shorter
RE+		46
RE-		26 shorter
G3		32,9 shorter
RE+		30
RE-		29

## T1b - T1c

RE- worse than RE+  
In G2 RE- worse than RE+

G3 is the worst of all,  
regardless of RE



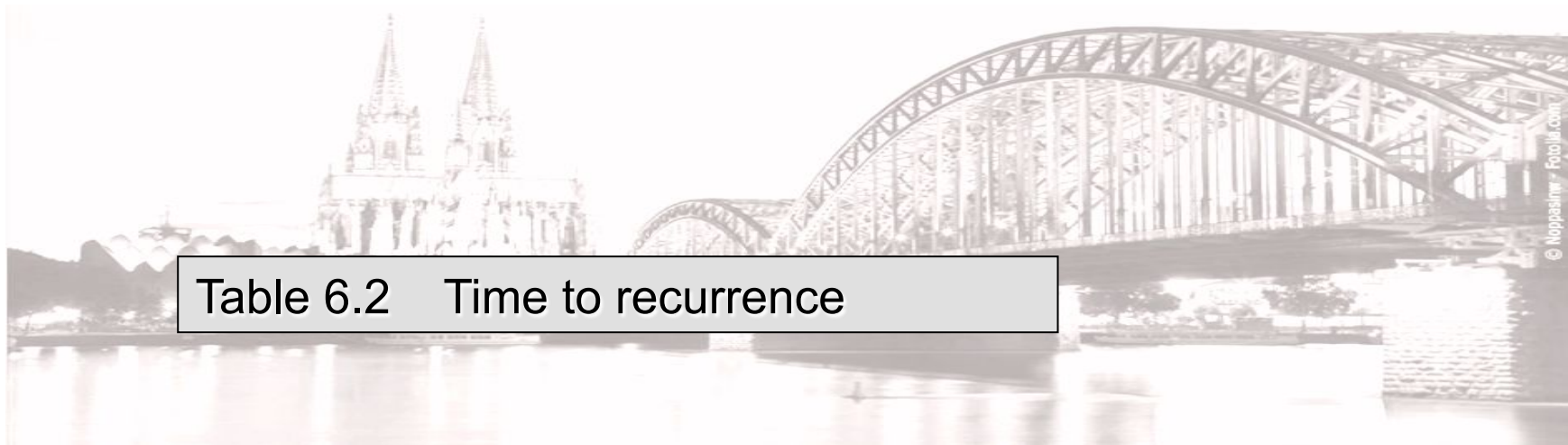


Table 6.2 Time to recurrence

Stage	Cases	Time to recurrence( mths)
T2	20	45,7
RE+		51
RE-		29,2 shorter
G2		50,6
G3		40,8 slightly shorter
RE+		52,4
RE-		29,2 shorter
N0	55	41,4
N+	22	40,6 about ½, similar

**T2**

RE- worse than RE+  
 In RE-G3 a little worse than G2  
 In G3 RE- worse than RE+

**N+**

Worse than N0

## Table 6. Therapy

Mastectomia	63%	52
Masctetomia + RT	9.2%	7
Riquadrantectomia + RT	7.8%	6
Mastectomy + Ifn alnd	3.8%	3
Riquadractomy alone	3.8%	3
Chemotherapy	3.8%	3
Hormone Therapy	2.6%	2

## Table 7. Status

Living without diseases	68,3%	<b>56</b>
Living with diseases	20,7%	<b>17</b>
Dead 9.8% (1 died for local progression, 5 for distant and local progression, and 2 for a second neoplasm)		<b>8</b>

## **FOLLOW UP**

- Average time to follow up free from disease after reprocessing recurrence with IORT **25,61** month with a range from **2 to 72 month**

## **FREE SURVIVAL TIME after re-treat.**

Survival average time from re-treatment of recurrence to IORT **25,45** month with a range from **2 to 72 month**