



# Follow-up del carcinoma tiroideo a rischio intermedio-alto



Bari,  
7-10 novembre 2013

## Identikit del paziente a rischio intermedio-alto

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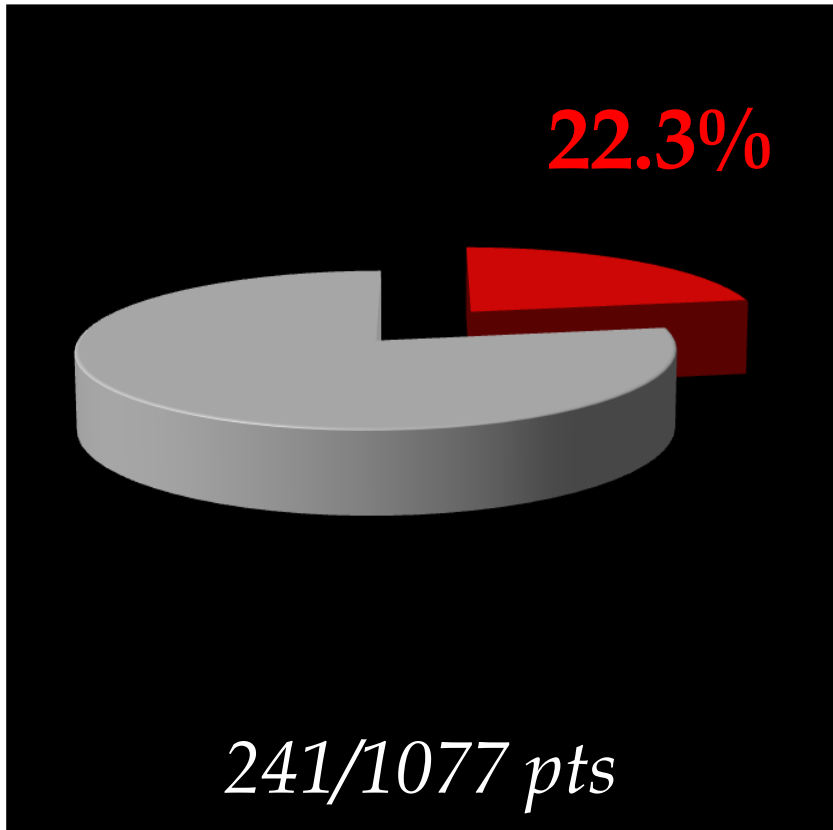


# Global risk of recurrence

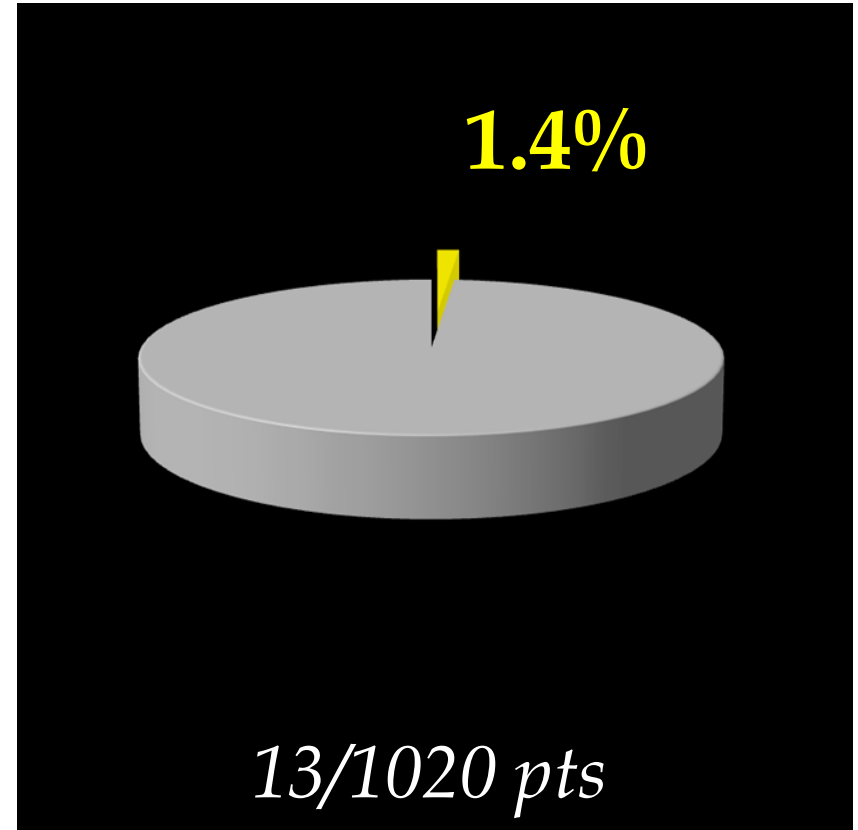


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The 1990s (1077 pts)



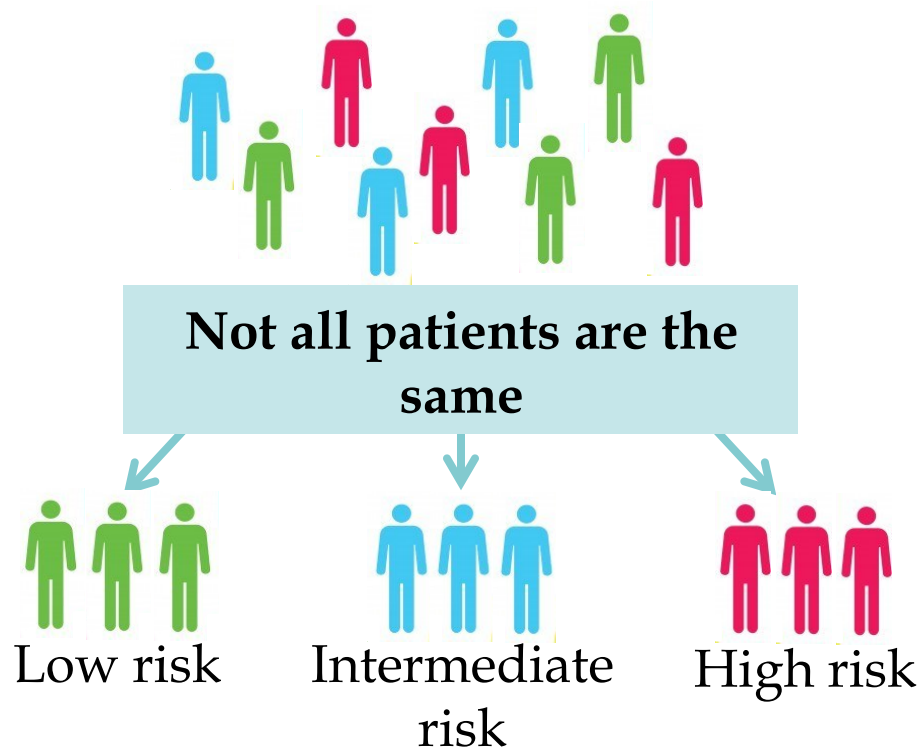
The 2010s (1020 pts)



Mazzaferri & Jhiang, Am J Med, 1994

Durante *et al.*, JCEM, 2013

## Why it is important?



We are moving from a population-wide versus **individual-based approach**



# Estimating the *individual* risk



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## *Why it is important?*

Risk stratification allows tailoring management strategies to individual risk.

- *Administration of  $^{131}\text{I}$  after surgery*
- *Use of TSH suppression*
- *Strategies and methods that will be used to detect disease recurrence*
- *Frequency and duration of follow-up*



51 yrs

- *Histology:* PTC, classic variant, 12 mm  
**pT1b, Nx - Stage I**



63 yrs

- *Histology:* PTC, follicular variant, 18 mm, extrathyroidal extension, 6 out of 21 metastatic lymph nodes  
**pT3, N1a - Stage III**

## ISSUES

- ✓ What is the risk of persistent/recurrent disease of these patients?
- ✓ How can we estimate their individual risk?

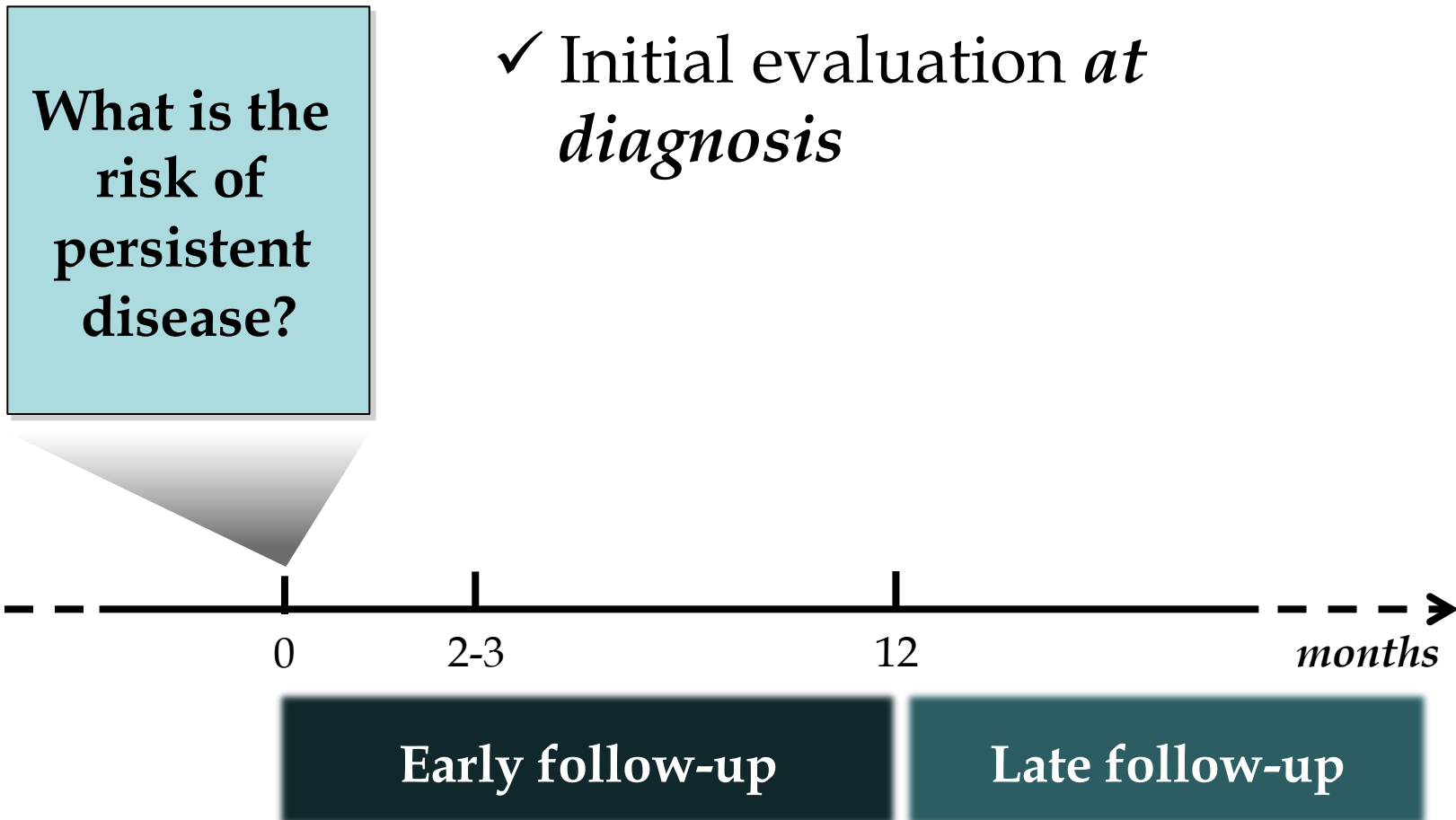
# Estimating the *individual* risk



- ✓ At any time during follow-up
- ✓ Reliable assessment requires the use of the right tool at the right time



# Estimating the *individual* risk



# Estimating the risk *at diagnosis*

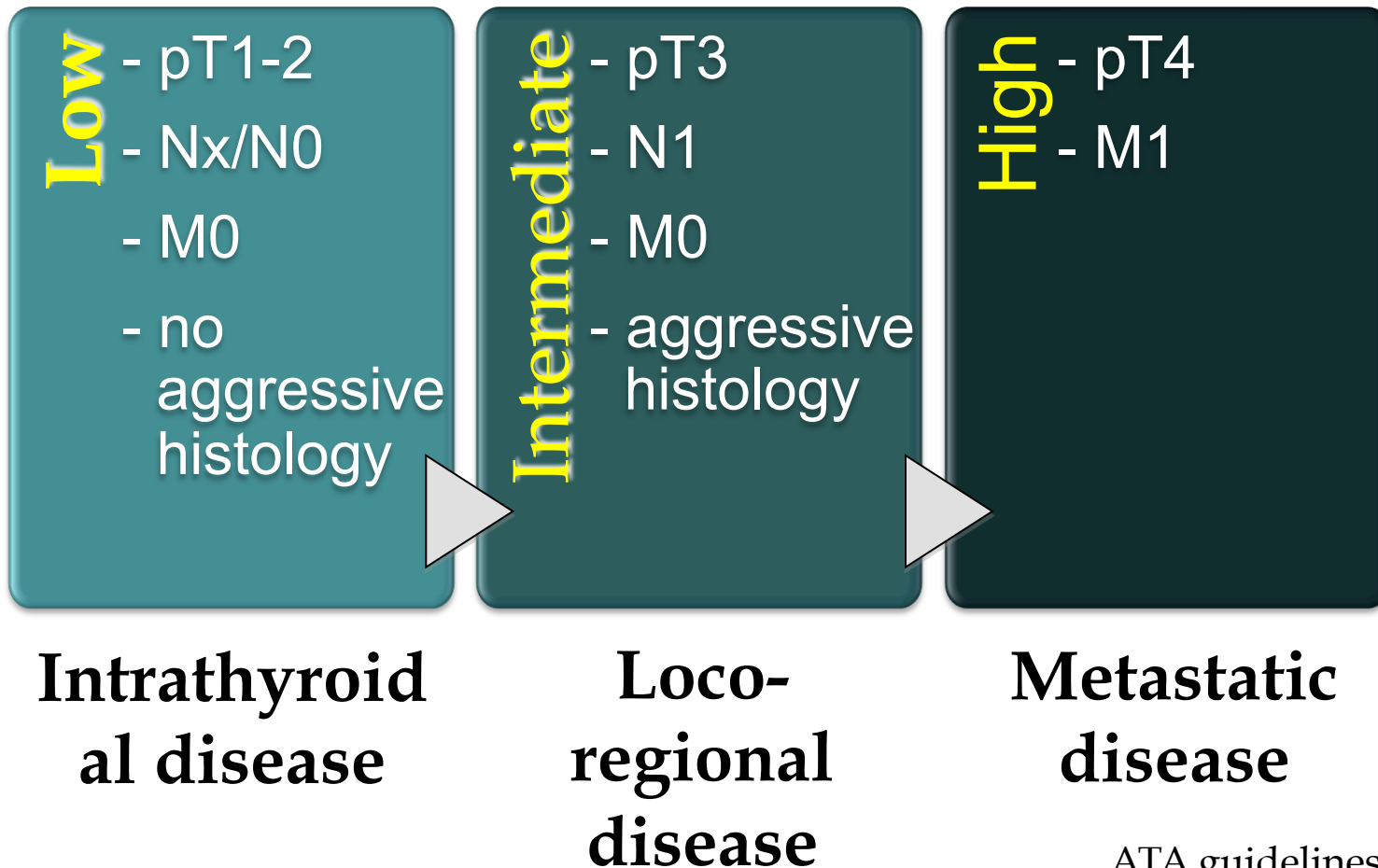


## *Risk of mortality*

|                   | EORTC | AGES | AMES | MACIS | OSU | SKMMC | AJCC |
|-------------------|-------|------|------|-------|-----|-------|------|
| Age               | X     | X    | X    | X     | --  | X     | X    |
| Sex               | X     | --   | X    | --    | --  | --    | --   |
| Size              | --    | X    | X    | X     | X   | X     | X    |
| Multicentricity   | --    | --   | --   | --    | X   | --    | --   |
| Grade             | --    | X    | --   | --    | --  | X     | --   |
| Histology         | X     | PTC  | X    | PTC   | --  | X     | X    |
| Invasion          | X     | X    | X    | X     | X   | X     | X    |
| Nodes             | --    | --   | --   | --    | X   | X     | X    |
| Metastases        | X     | X    | X    | X     | X   | X     | X    |
| Complete excision | --    | --   | --   | X     | --  | --    | --   |



## Risk of recurrence: ATA staging systems



# Estimating the risk *at diagnosis*



## *ATA risk*

**Low**  
(*n*=104)

**Intermediate**  
(*n*=241)

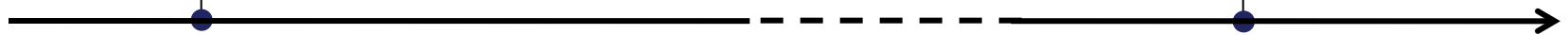
**High**  
(*n*=126)

## *Recurrence*

3%

18%

66%



0

7

*Time*  
(yrs; median)



# Estimating the risk *at diagnosis*



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## *Limits*

There are two main factors that can significantly alter the odds of recurrence (*and death*) over time:

- *the clinical course of the disease*
- *its response to the initial therapy and any interventions performed thereafter*

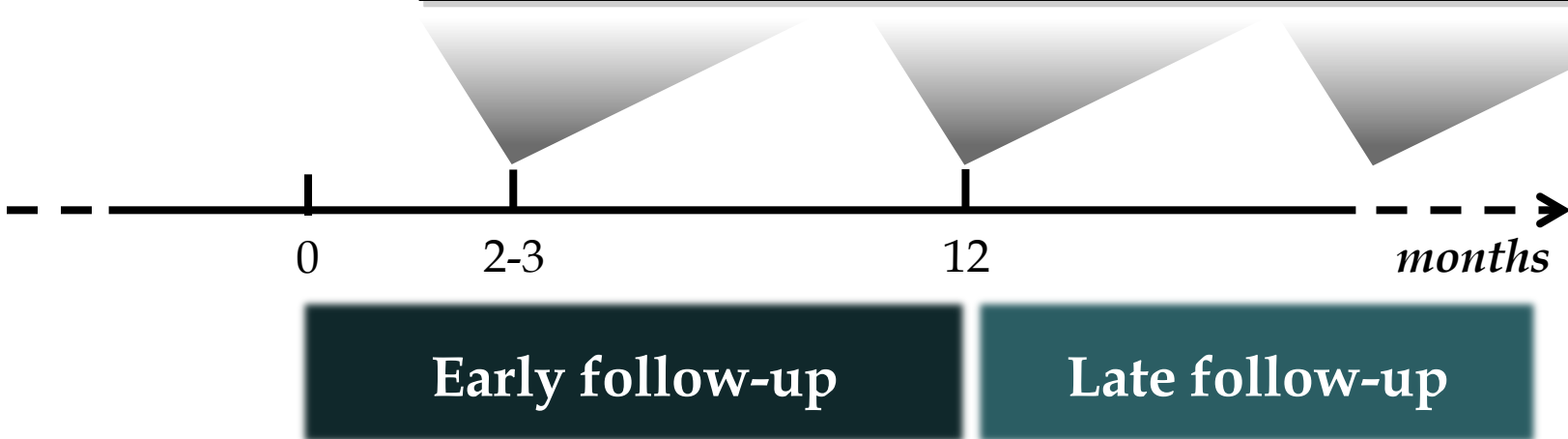


# Estimating the *individual* risk



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Ongoing revision and refinement of the risk estimate as new data emerge during follow-up



# Estimating the *ongoing* risk



## *ATA risk*

**Low**  
(*n*=104)

**Intermediate**  
(*n*=241)

**High**  
(*n*=126)

## *Recurrence*

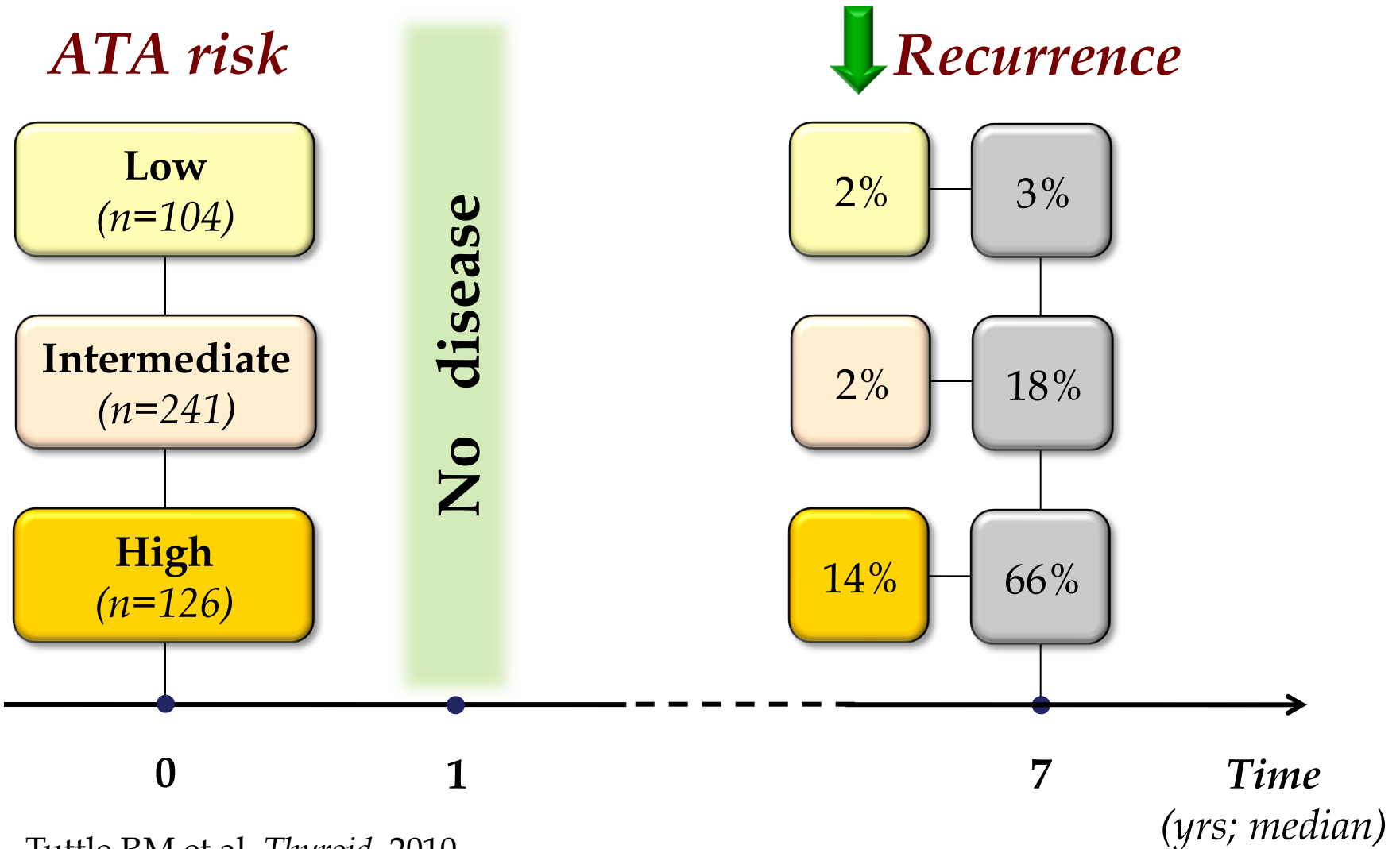
3%

18%

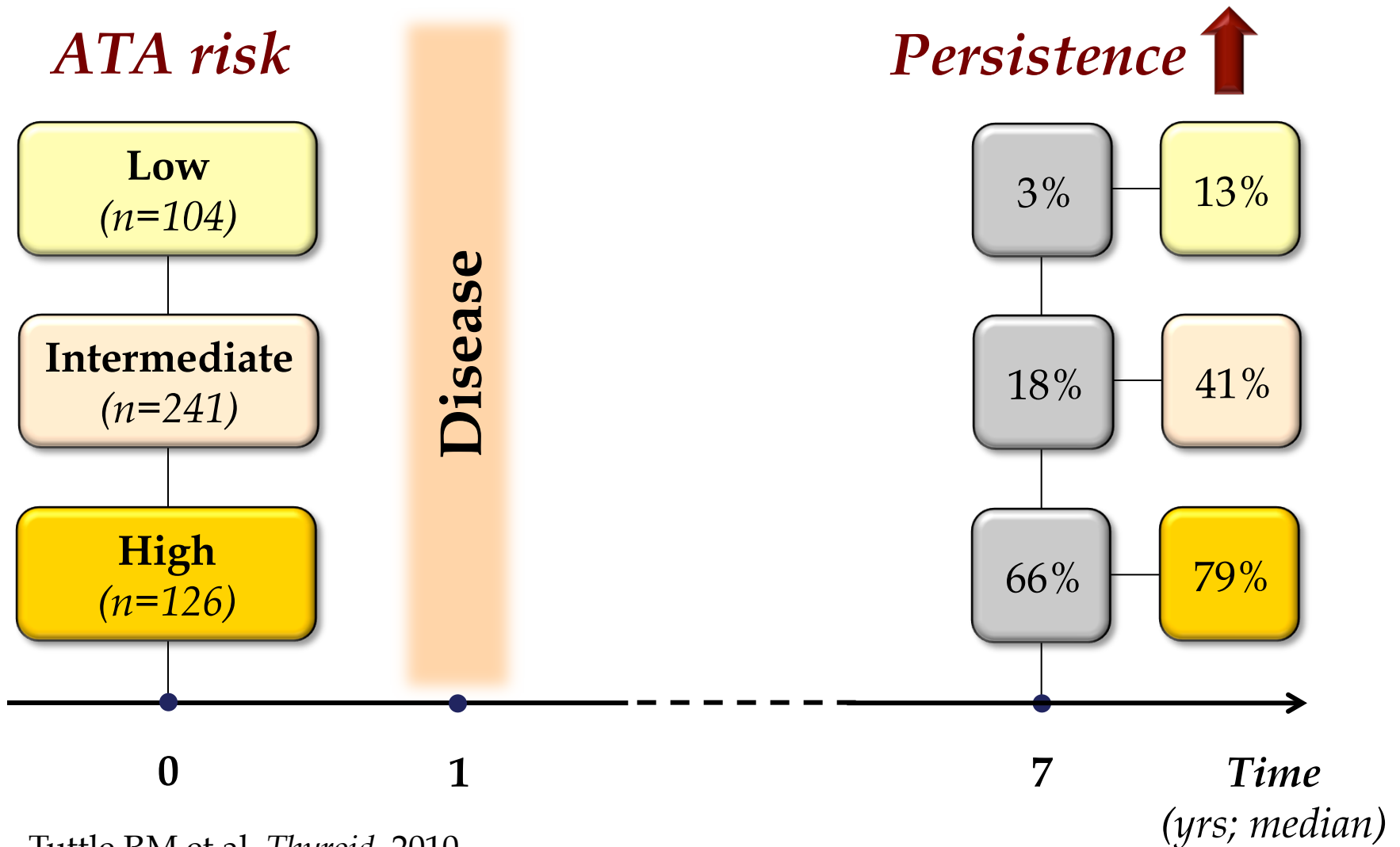
66%



# Estimating the *ongoing* risk



# Estimating the *ongoing* risk





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## ISSUES

- ✓ Risk at diagnosis (*ATA risk*): **LOW (3%)**
- ✓ 1-yr follow-up visit: **no evidence of disease**

- ✓ Risk at diagnosis (*ATA risk*): **INTERMEDIATE (18%)**
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## ISSUES

- ✓ Risk at diagnosis (*ATA risk*): **LOW (3%)**
- ✓ Risk reassessment (1-yr *F-up*): **LOW (2%)**

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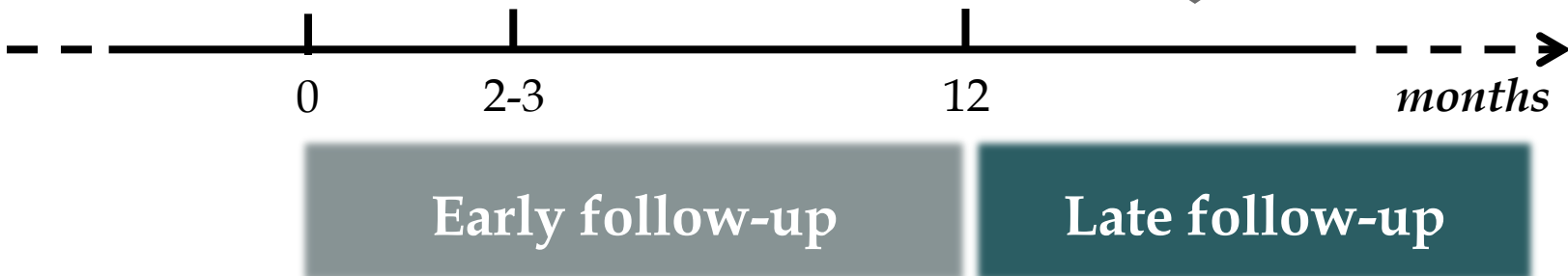


# Time to recurrence



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Do they  
require life-  
long follow-  
up?



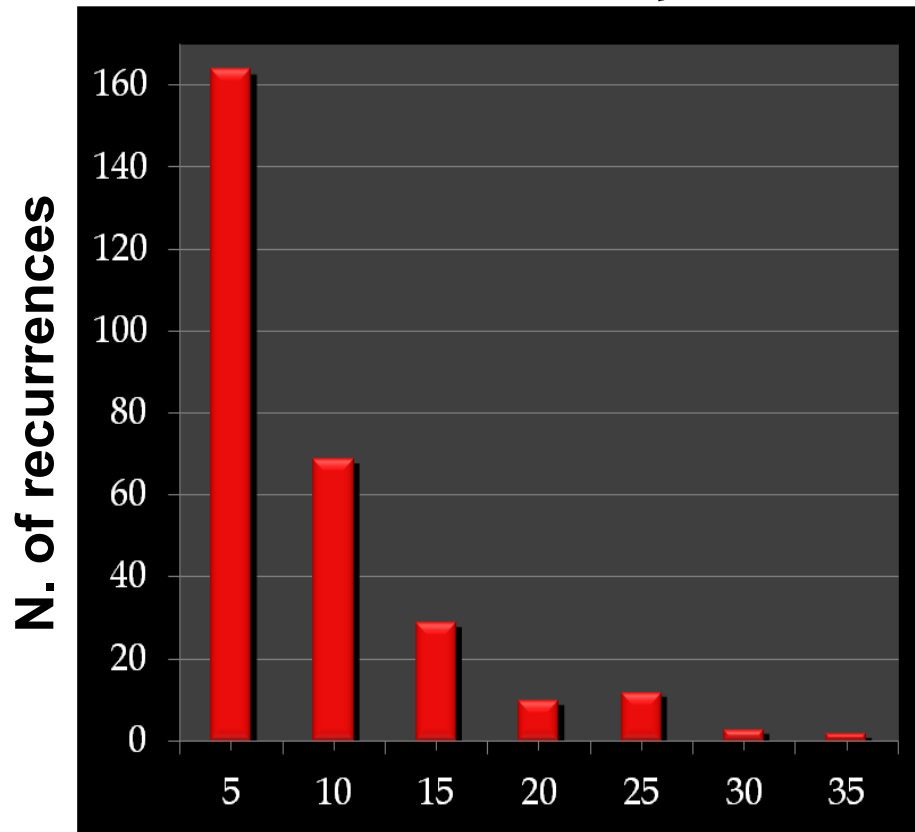


# Time to recurrence

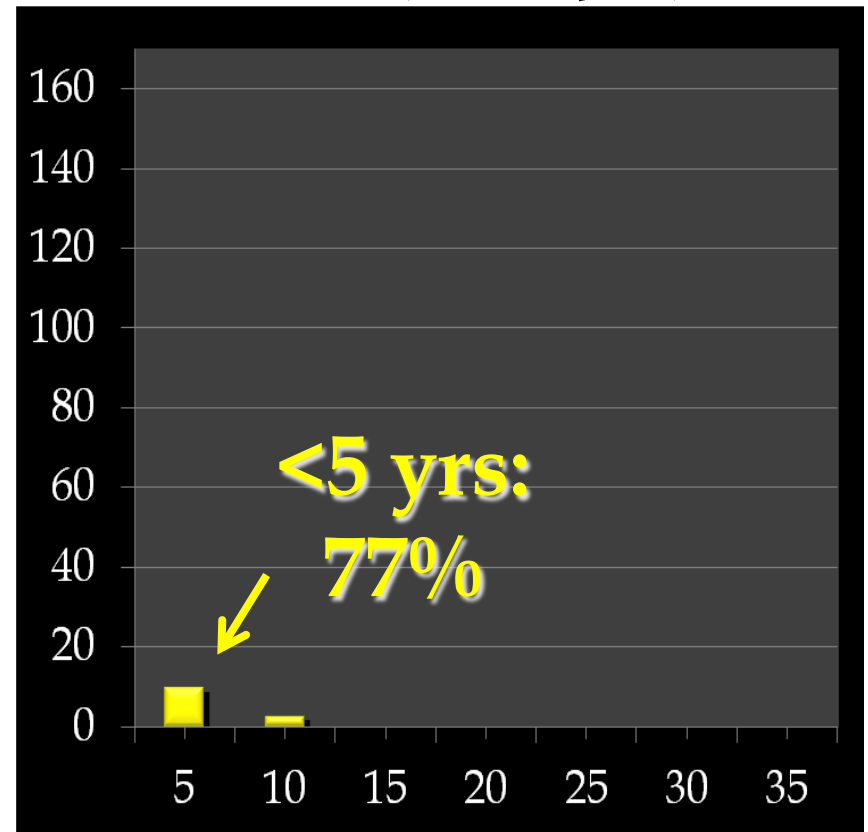


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## The 1990s (1077 pts)



## The 2010s (1020 pts)



Yrs after initial therapy

Mazzaferrri & Jhiang, Am J Med, 1994

Durante *et al.*, JCEM, 2013



# Conclusions



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- Today we are moving toward increasingly individualized, risk-tailored diagnostic/therapeutic protocols
- Tailoring management strategies to individual risk can increase the cost-effectiveness of care and in many cases improve the patient's quality of life