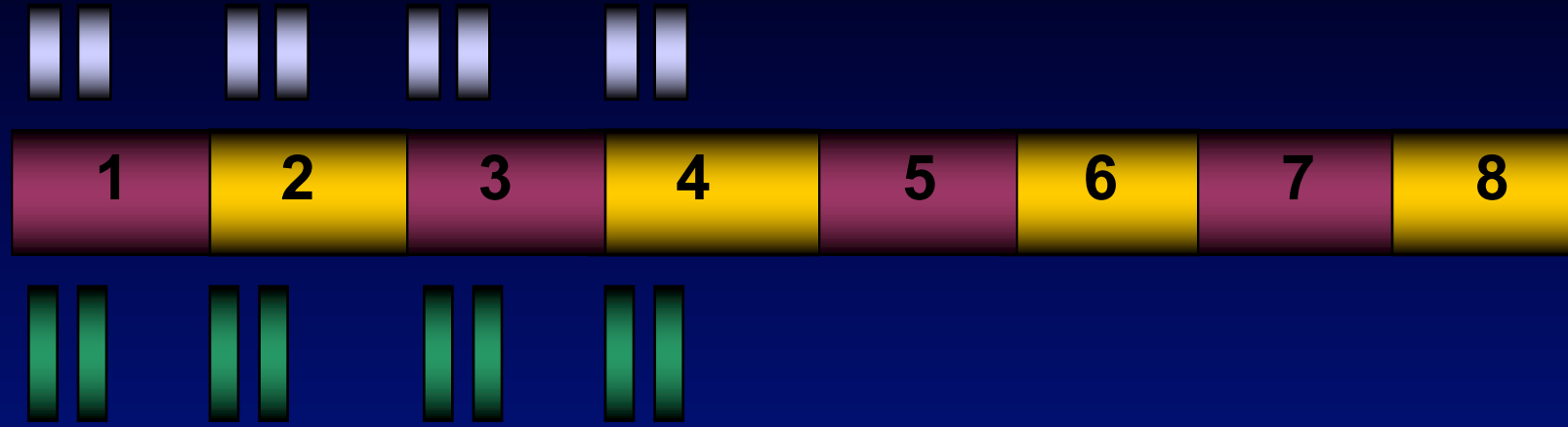


# **MD Anderson Cancer Center**

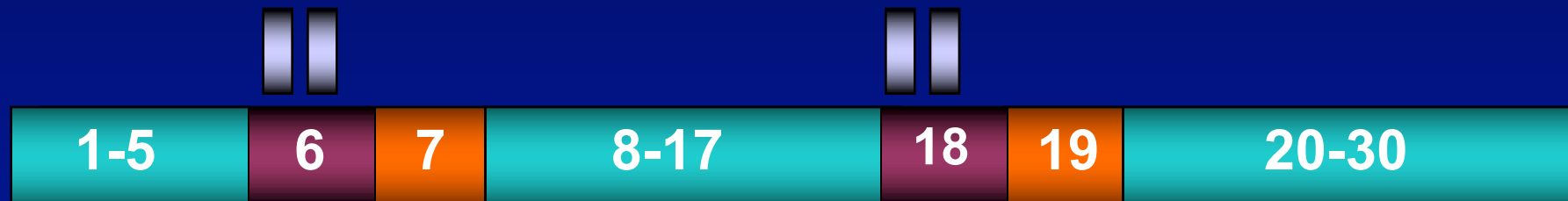
**Front-line and R/R ALL  
Treatment Regimens**

# Hyper-CVAD + Rituximab in Precursor B-ALL

## Intensive phase



## Maintenance phase



 Hyper-CVAD

 Rituximab

 POMP

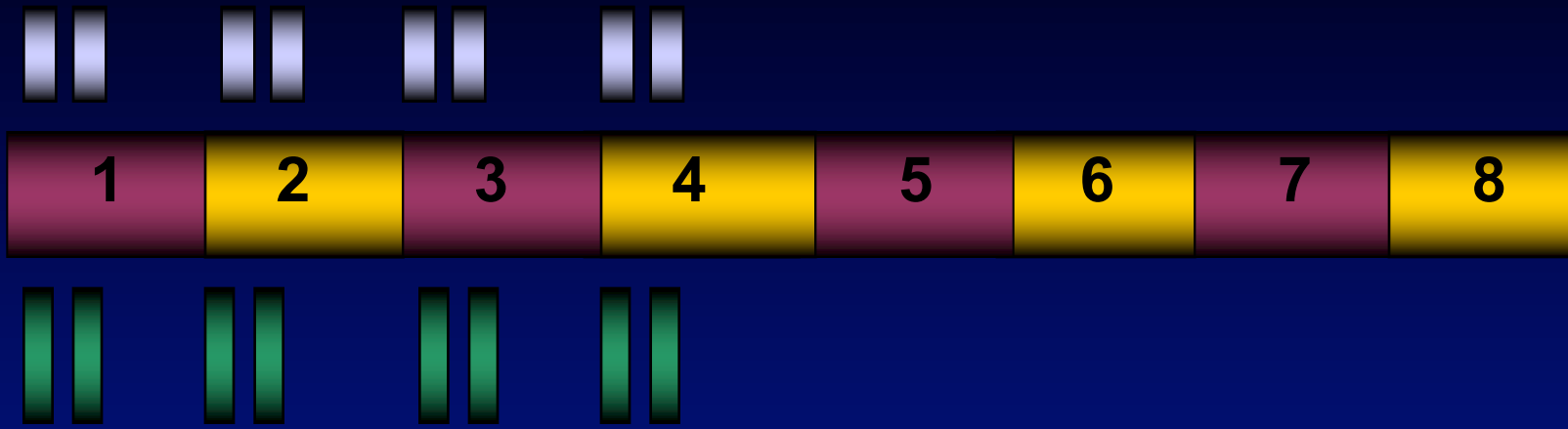
 MTX-ara-C

 IT MTX, ara-C

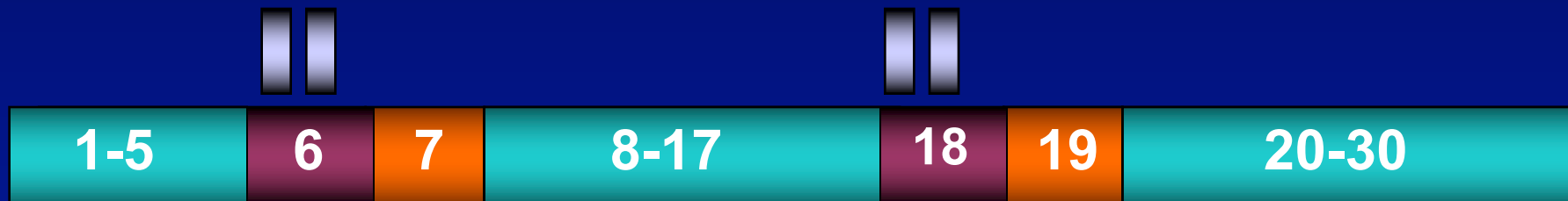
 MTX-asp

# HCVAD + Ofatumumab in B-ALL : Design

## Intensive phase



## Maintenance phase



 Hyper-CVAD

 Ofatumumab

 POMP

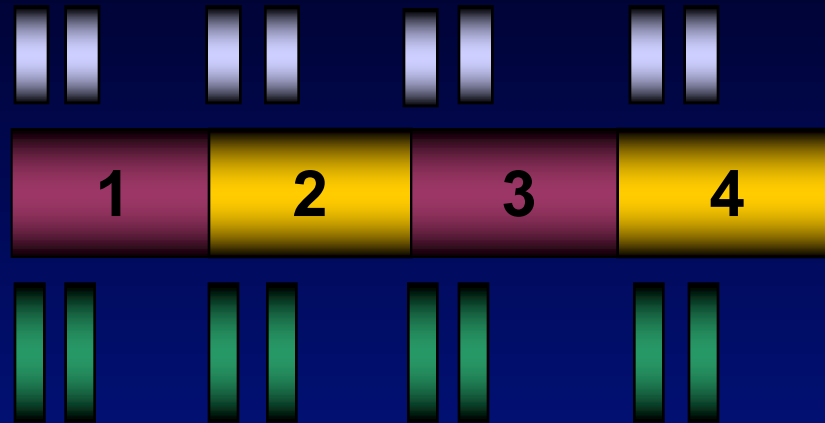
 MTX-ara-C

 IT MTX, ara-C

 MTX-Peg asp

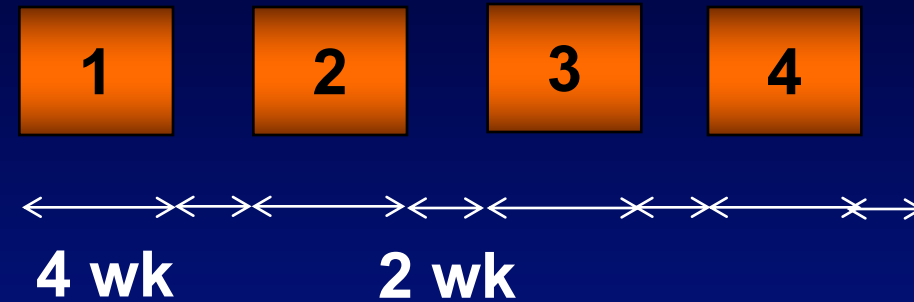
# Hyper-CVAD + Blinatumomab in B-ALL (Ph-negative B-ALL < 60 years). Treatment schedule

## Intensive phase

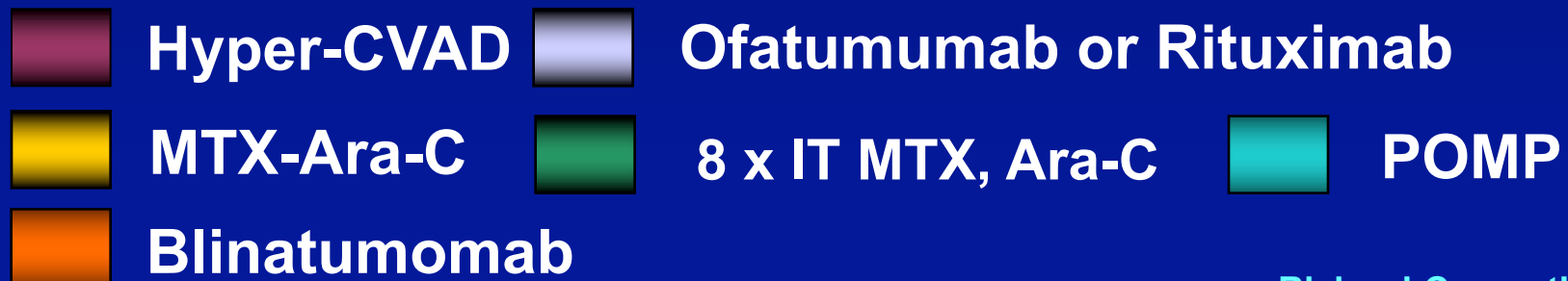


## Blinatumomab phase

\*After 2 cycles of chemo for Ho-Tr, Ph-like, t(4;11)

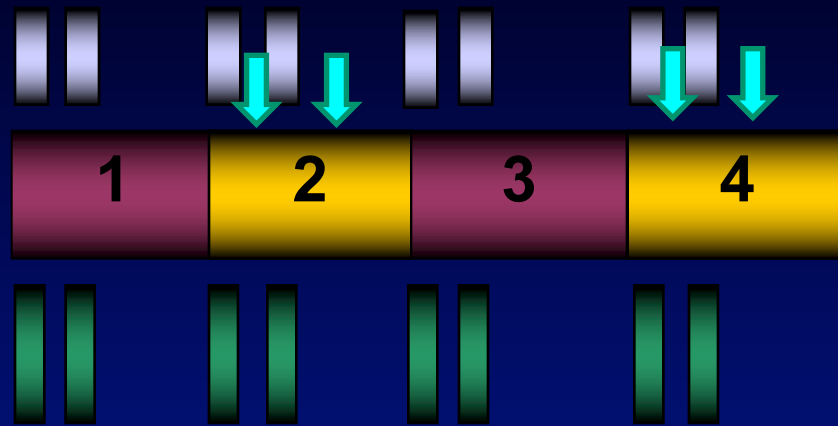


## Maintenance phase



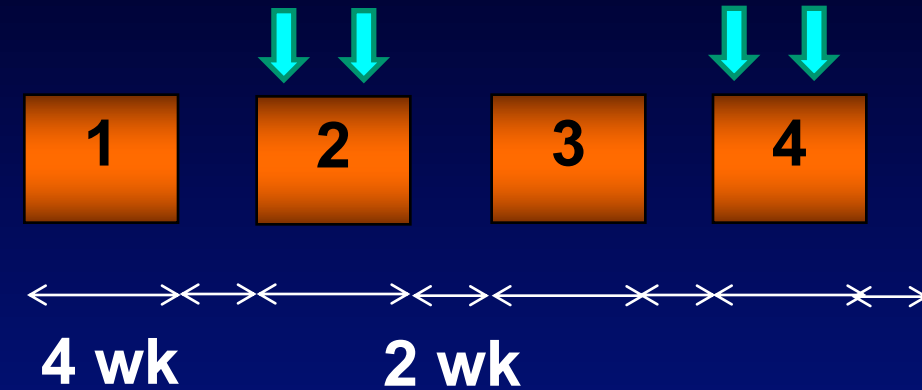
# Hyper-CVAD + Inotuzumab + Blinatumomab in B-ALL (Ph-negative B-ALL < 60 years)

## Intensive phase

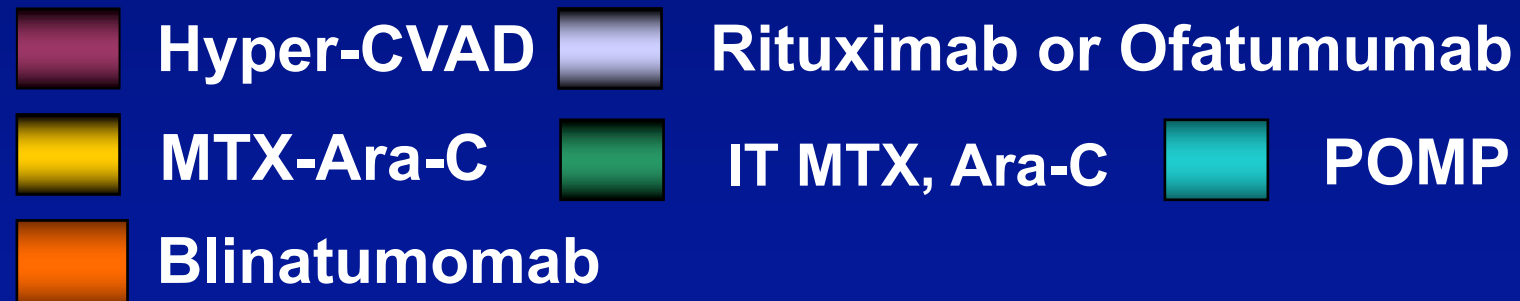


## Blinatumomab phase

\*After 2 cycles of chemo for Ho-Tr, Ph-like, t(4;11)



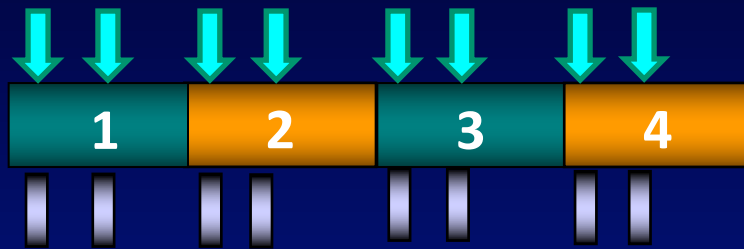
## Maintenance phase



↓ ↓ Inotuzumab 0.3 mg/m<sup>2</sup> on D1 and D8

# Mini-HCVD + INO ± Blina in Older ALL: Modified Design (Pts #50+)

## Intensive phase



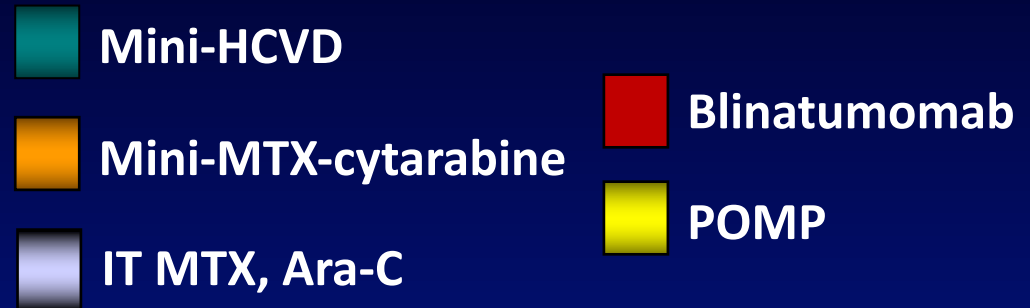
## Consolidation phase



## Maintenance phase



← 18 months →



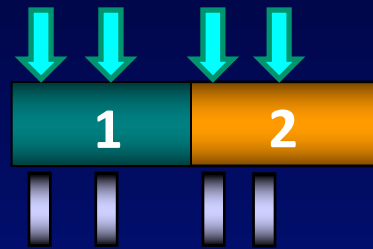
INO*	Total dose (mg/m <sup>2</sup> )	Dose per day (mg/m <sup>2</sup> )
C1	0.9	0.6 D2, 0.3 D8
C2-4	0.6	0.3 D2 and D8

Total INO dose = 2.7 mg/m<sup>2</sup>

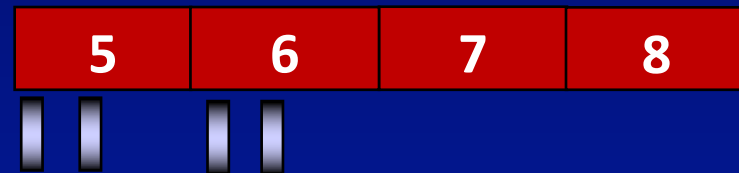
\*Ursodiol 300mg tid for VOD prophylaxis

# Mini-HCVD + INO ± Blina in Older ALL: Amended Design (Pts ≥70 years)

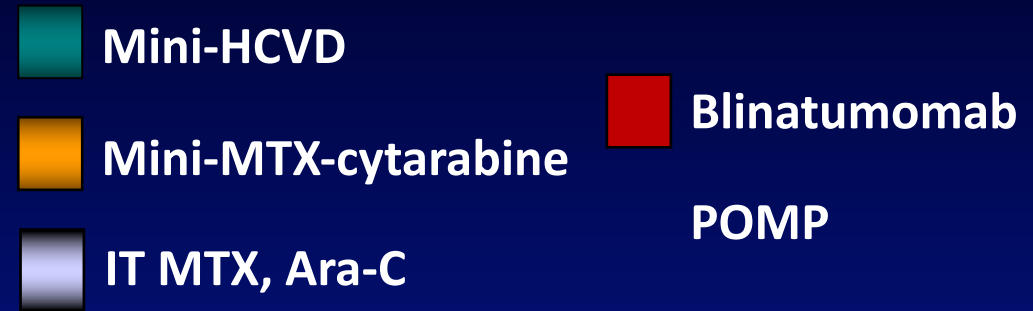
## Intensive phase



## Consolidation phase



## Maintenance phase



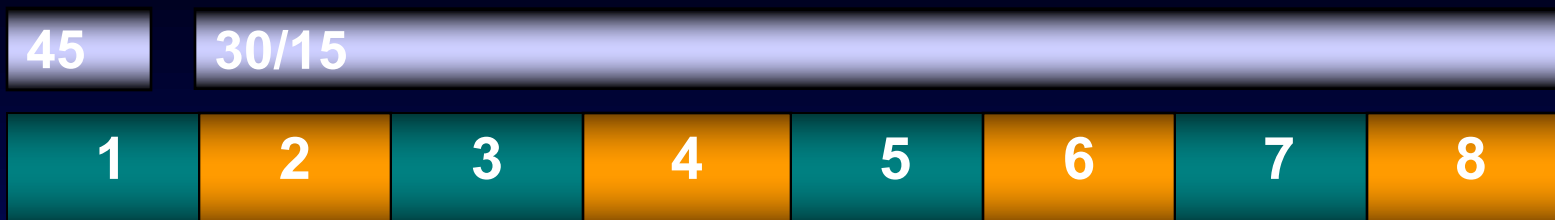
INO*	Total dose (mg/m <sup>2</sup> )	Dose per day (mg/m <sup>2</sup> )
C1	0.9	0.6 D2, 0.3 D8
C2	0.6	0.3 D2 and D8

**Total INO dose = 1.5 mg/m<sup>2</sup>**

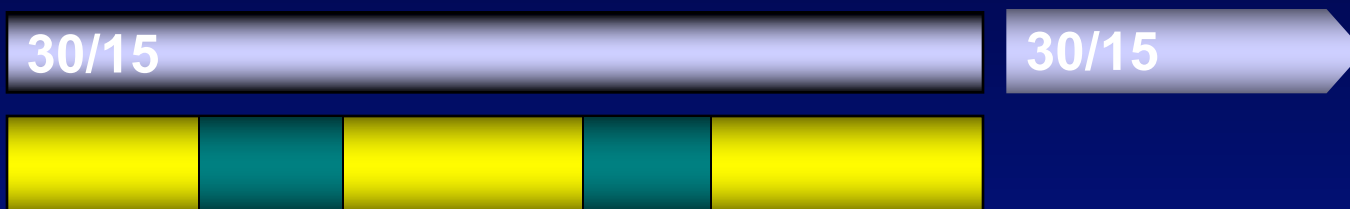
\*Ursodiol 300mg tid for VOD prophylaxis

# Hyper-CVAD + Ponatinib. Design

## Intensive phase

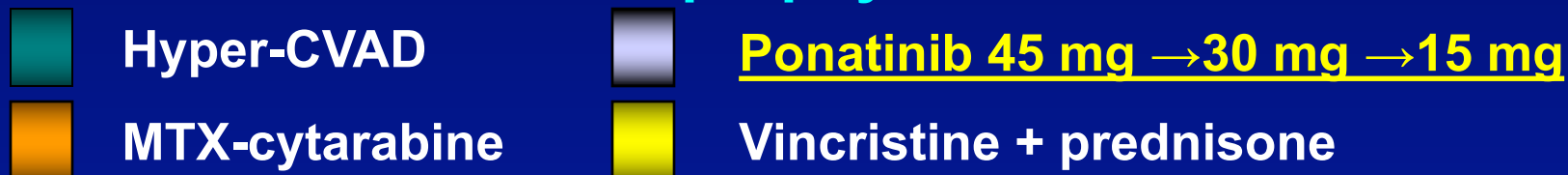


## Maintenance phase



← 24 months →

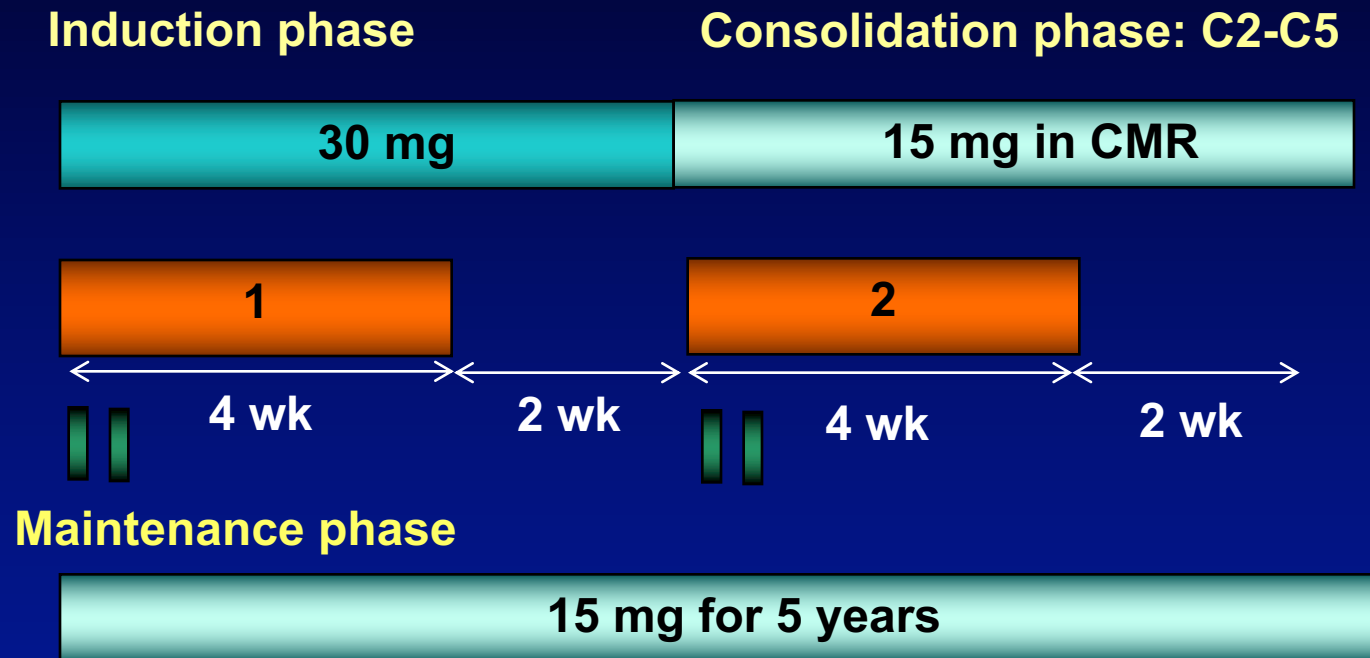
12 intrathecal CNS prophylaxis



- After the emergence of vascular toxicity, protocol was amended: Beyond induction, ponatinib 30 mg daily, then 15 mg daily once in CMR



# Blinatumomab-ponatinib in Ph-Positive ALL



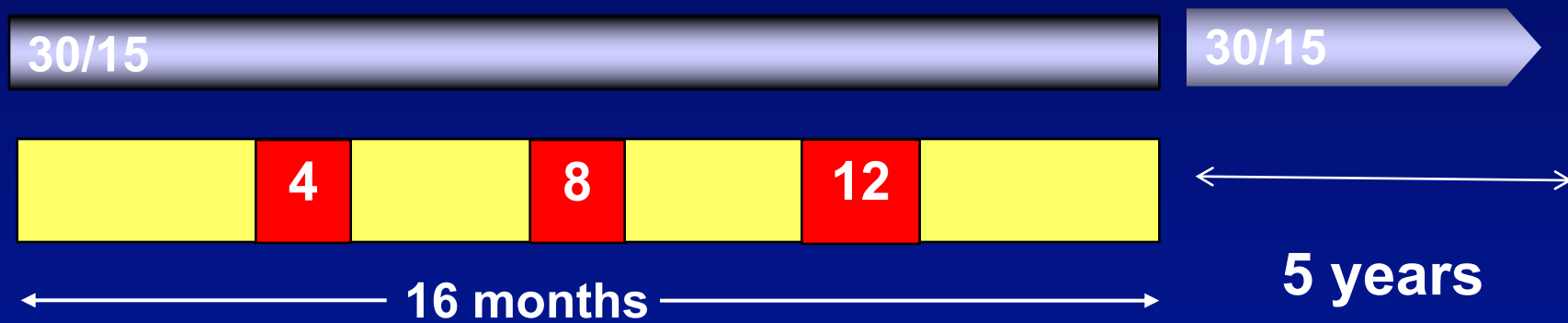
 Blinatumomab  IT MTX, Ara-C  Ponatinib 30 mg  Ponatinib 15 mg

# Hyper-CVD + Ponatinib + Blinatumomab in Ph-positive ALL

## Intensive phase



## Maintenance phase

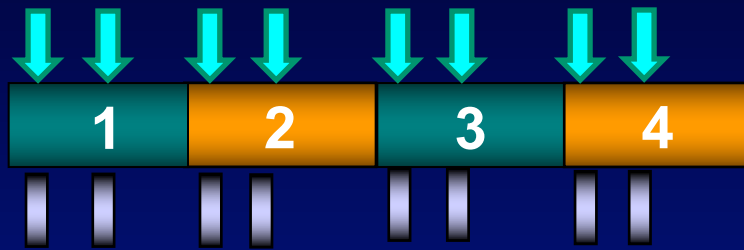


## CNS prophylaxis (N=12)



# Mini-HCVD + INO ± Blinatumomab in R/R ALL Modified Design

## Intensive phase



- Mini-HCVD
- Mini-MTX-cytarabine
- IT MTX, Ara-C
- Blinatumomab
- POMP
- ↓ INO

## Consolidation phase



	Total dose (mg/m <sup>2</sup> )	Dose per day (mg/m <sup>2</sup> )
C1	0.9	0.6 D1, 0.3 D8
C2-4	0.6	0.3 D1 and D8

**Total INO dose = 2.7 mg/m<sup>2</sup>**

## Maintenance phase

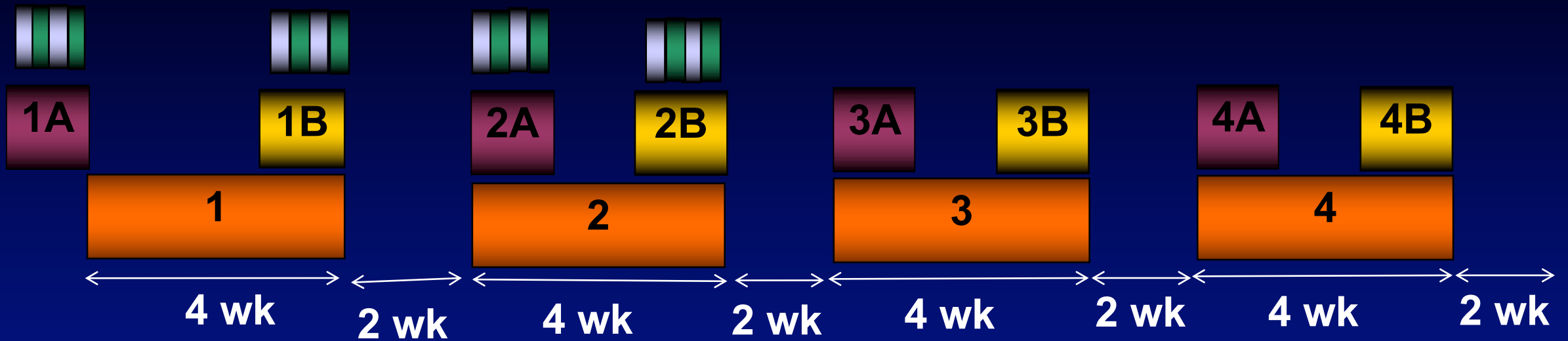


← 18 months →

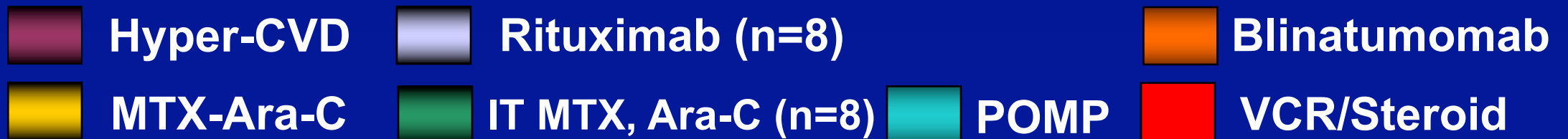
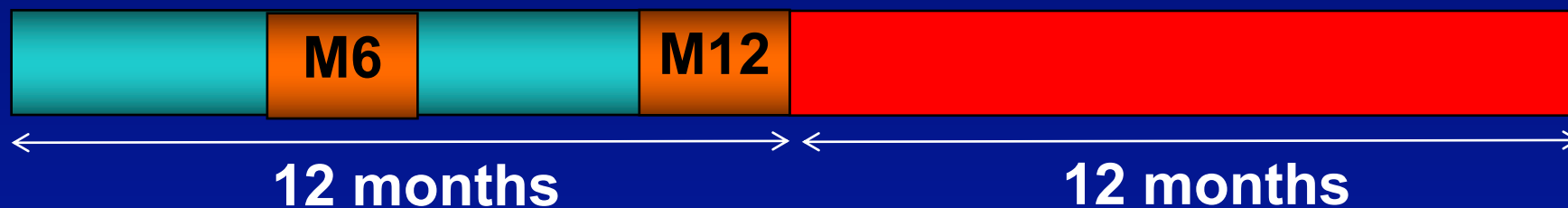
# Hyper-CVD + Blinatumomab in R-R B-ALL

Induction phase

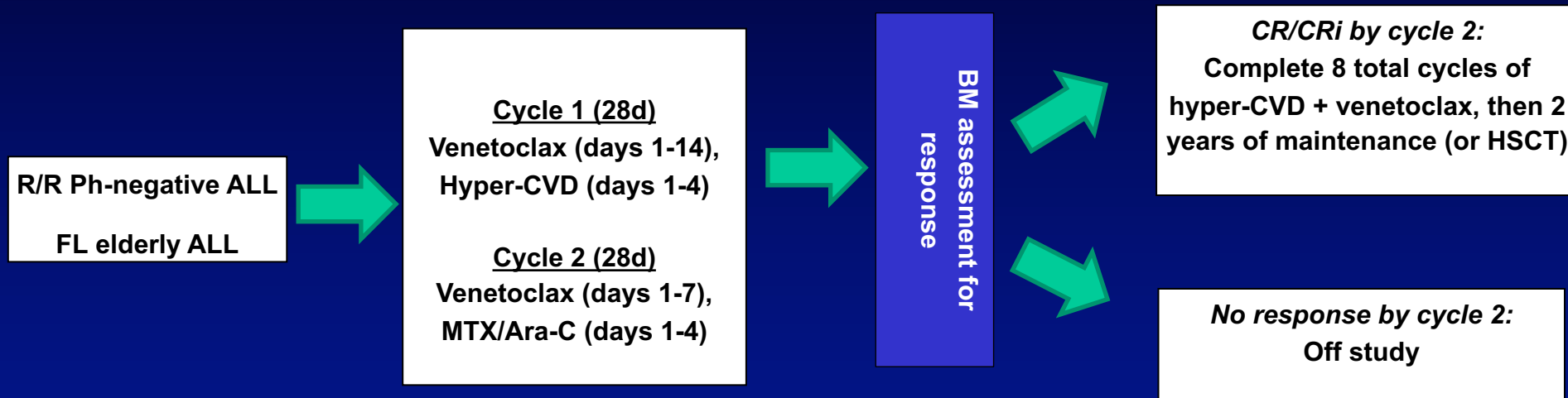
Consolidation phase: C2-C4



Maintenance phase



# Hyper-CVD + Venetoclax for R-R and FL Elderly ALL



- Patients with T-ALL also receive nelarabine + peg-asparaginase
- Maintenance x 2 years with vincristine + prednisone + venetoclax