

# New clinical trials : Integration of new therapies and MRD

Prof. Cyrille Touzeau  
Nantes, France

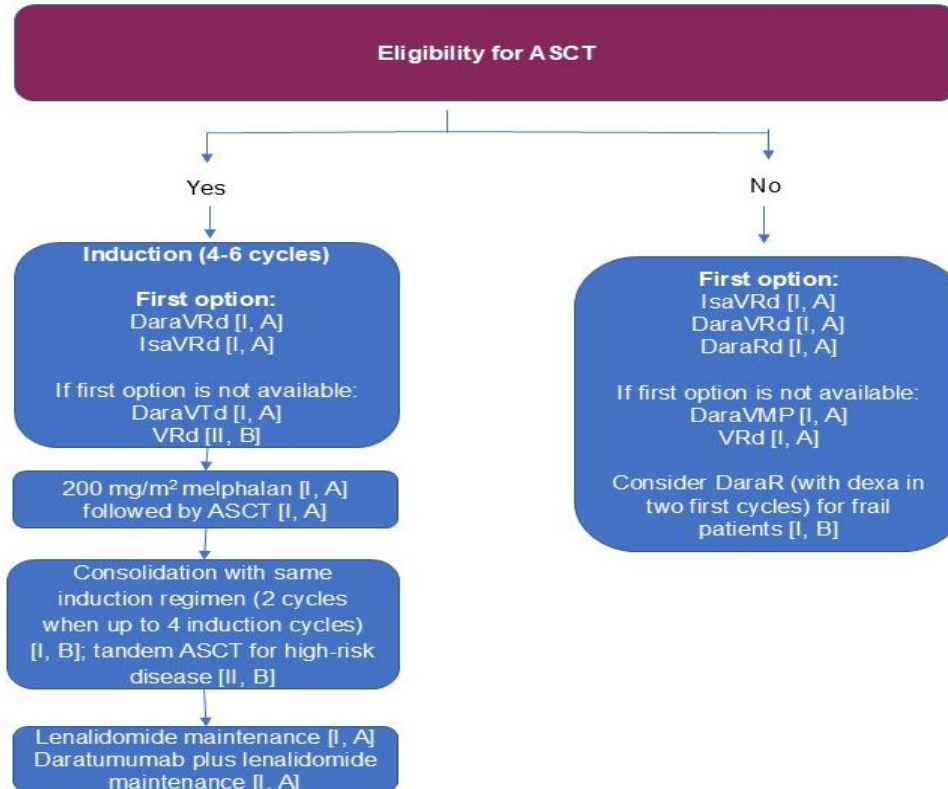


# Disclosures

Advisory board and honoraria from :

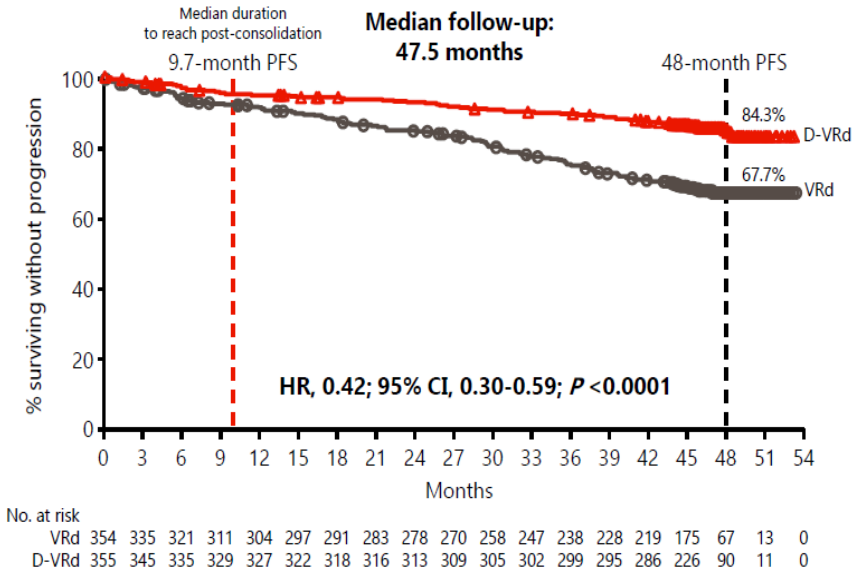
J&J, Pfizer, Abbvie, Sanofi, Regeneron, Menarini, GSK

# International guidelines



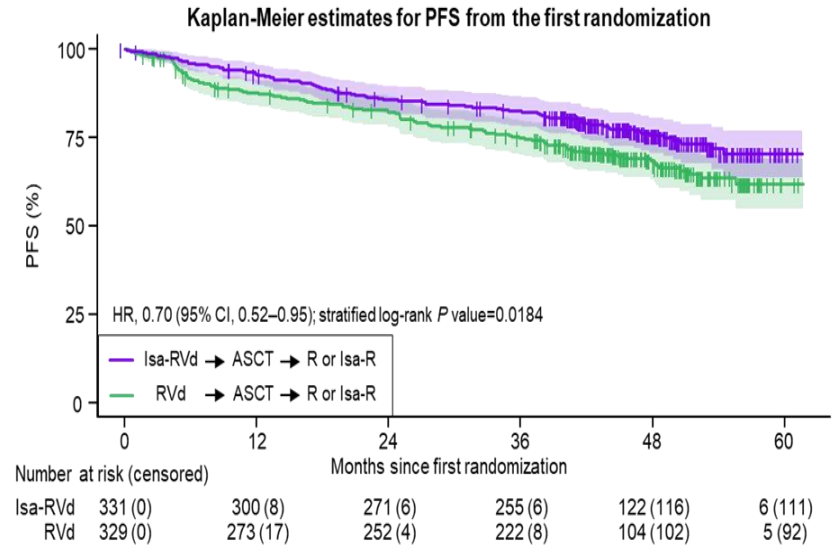
# Quad + transplant in transplant eligible myeloma patients

## PERSEUS DVRD vs VRD + transplant



Sonneveld et al. NEJM 2023

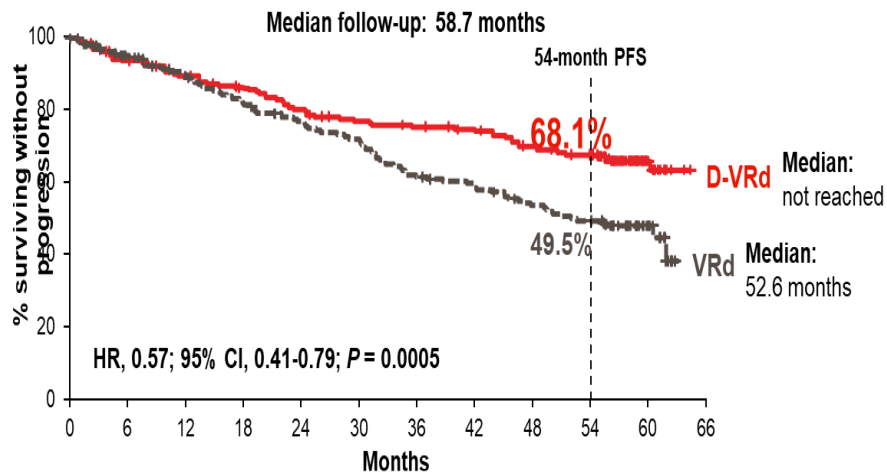
## GMMG HD7 IsaVRD vs VRD + transplant



Mai et al. J Clin Oncol 2024

# Quad regimen in transplant ineligible myeloma patients

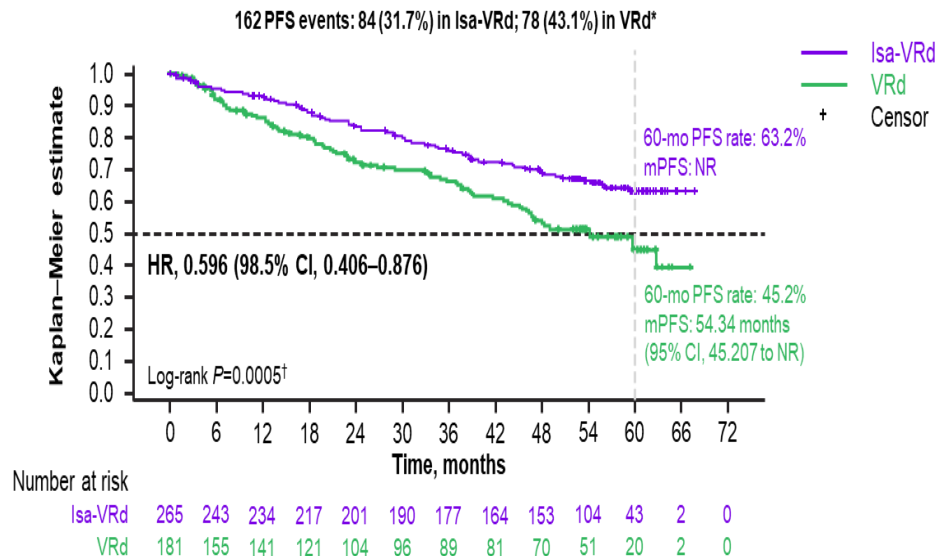
## CEPHEUS DVRD vs VRD



No. at risk	0	6	12	18	24	30	36	42	48	54	60	66
D-VRd	197	180	170	160	149	140	136	132	122	115	33	0
VRd	198	174	157	143	131	123	105	98	88	81	21	0

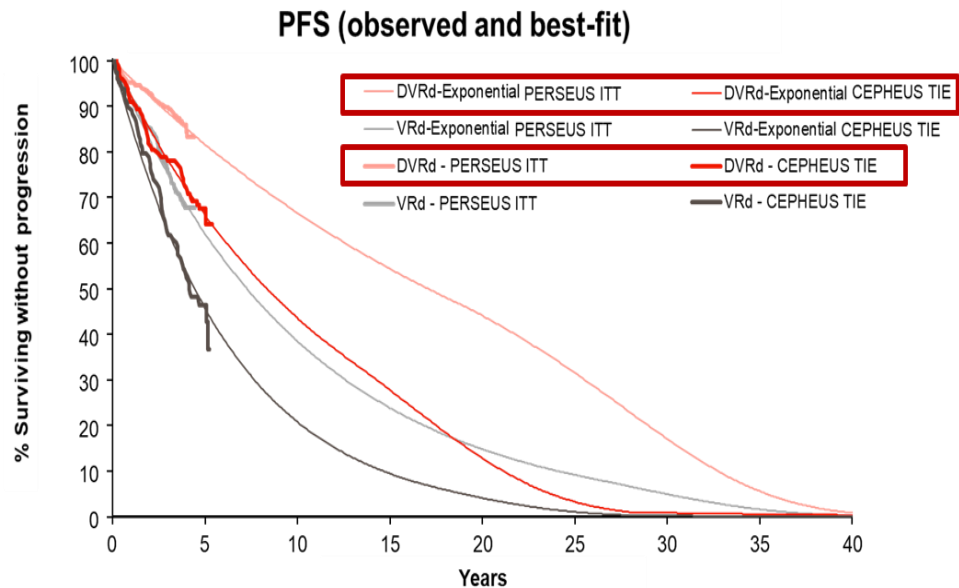
Usmani et al. Nat Med 2025

## IMROZ IsaVRD vs VRD



Facon et al. NEJM 2024

# Very high projected PFS with Quad +/- ASCT

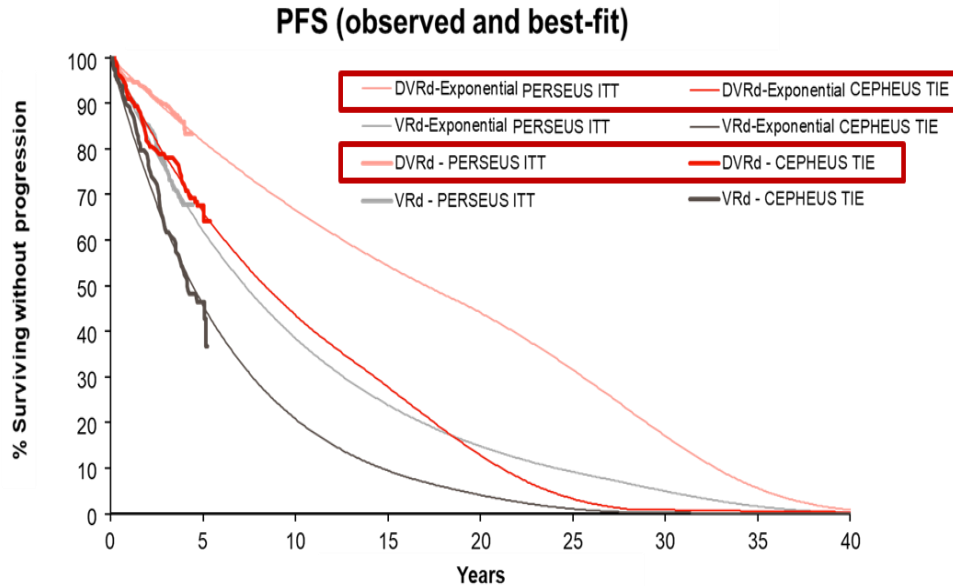


## Estimated PFS, DVRd vs VRd

PERSEUS: 205 months (17.1 years) vs 87 months (7.3 years)

CEPHEUS: 100 months (8.3 years) vs 53 months (4.4 years)

# Very high projected PFS with Quad +/- ASCT



## Estimated PFS, DVRd vs VRd

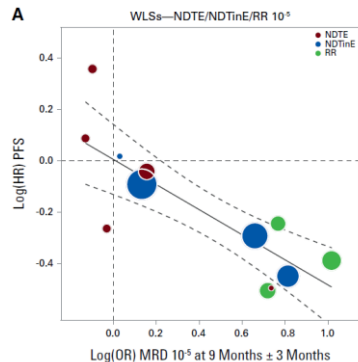
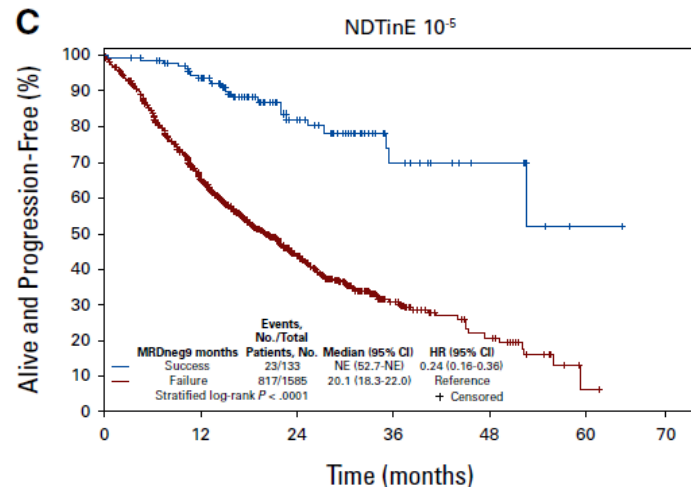
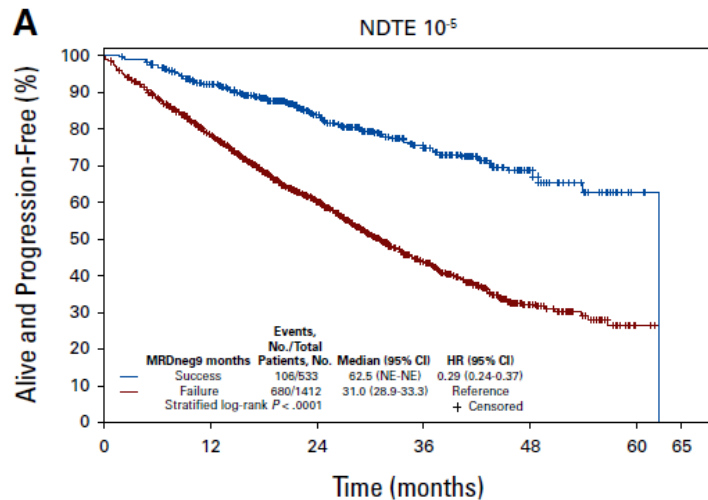
PERSEUS: 205 months (17.1 years) vs 87 months (7.3 years)  
CEPHEUS: 100 months (8.3 years) vs 53 months (4.4 years)

**PFS remains the gold standard  
Primary endpoint for registration  
ph3 trials.**

**However, future trials will need  
long follow up to detect  
significant PFS difference**

**New endpoints are therefore  
needed to accelerate access to  
therapeutic innovation**

# MRD endpoint for accelerated assessment of clinical trials in myeloma



## i2TEAMM initiative :

- Individual patient data from 11 randomized studies (n=4773)
- **MRD-CR (at 9 or 12 months) strongly correlates with PFS at patient level**
- Strong trial-level correlations (MRD-CR/PFS) observed in NDMM

# MRD endpoint for accelerated assessment of clinical trials in myeloma

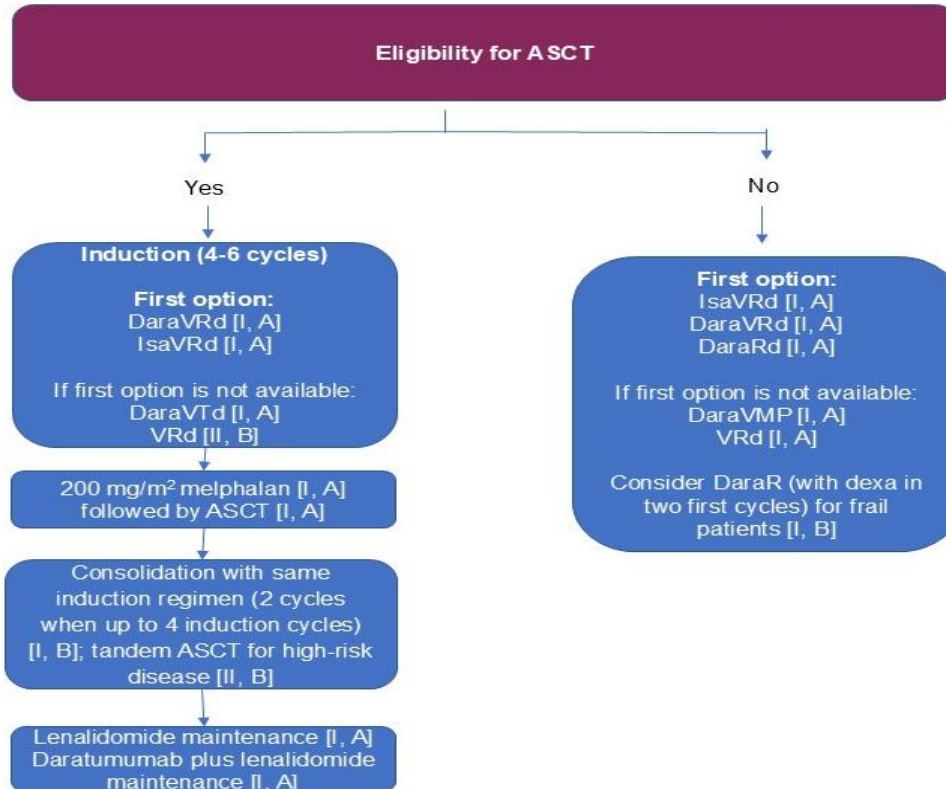
April 12, 2024 , the FDA's ODAC voted 12 to 0 that available data supports the use of minimal residual disease (MRD) as an end point for accelerated approval of new treatments for patients with multiple myeloma.

# Ongoing /future trials in NDMM

- **Incorporation of MRD in trial design**
  - (co) primary endpoint
  - MRD driven strategies
- **Incorporation of novel immunotherapies (ADC, CART, Bispab) in frontline**

# International guidelines

  
**New trials  
In TE NDMM**



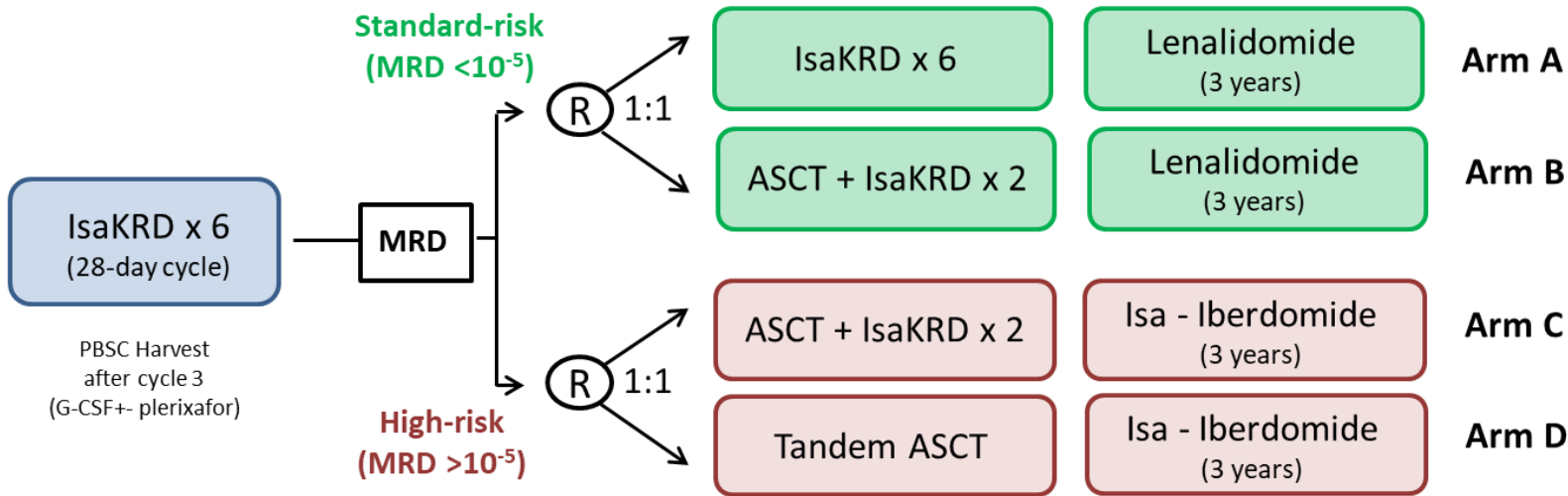
# MRD driven strategies



**Induction**

**MRD assessment**

**Risk-adapted consolidation and maintenance**



# MRD driven strategies

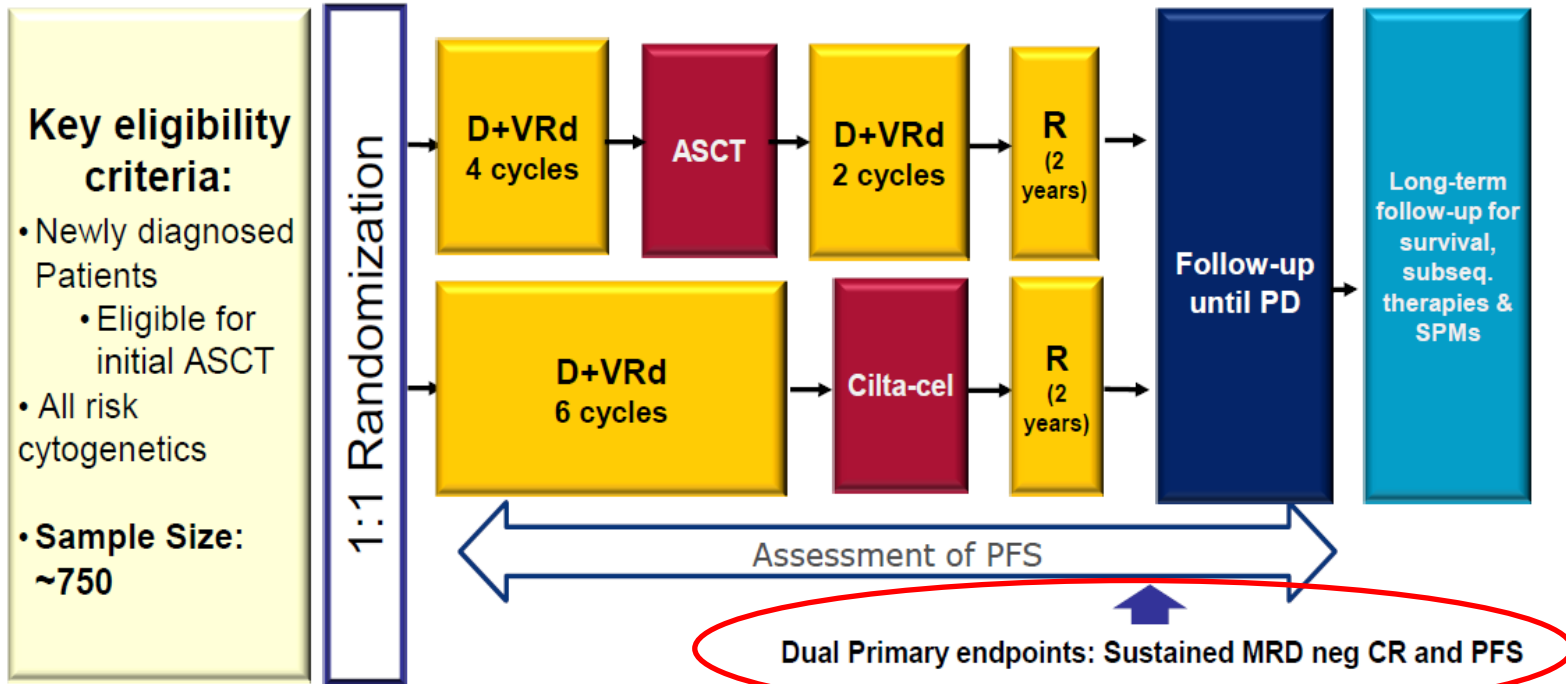


A MRD-Negative Status at  $10^{-6}$  Sensitivity



# To challenge ASCT with CART

## CARTITUDE-6



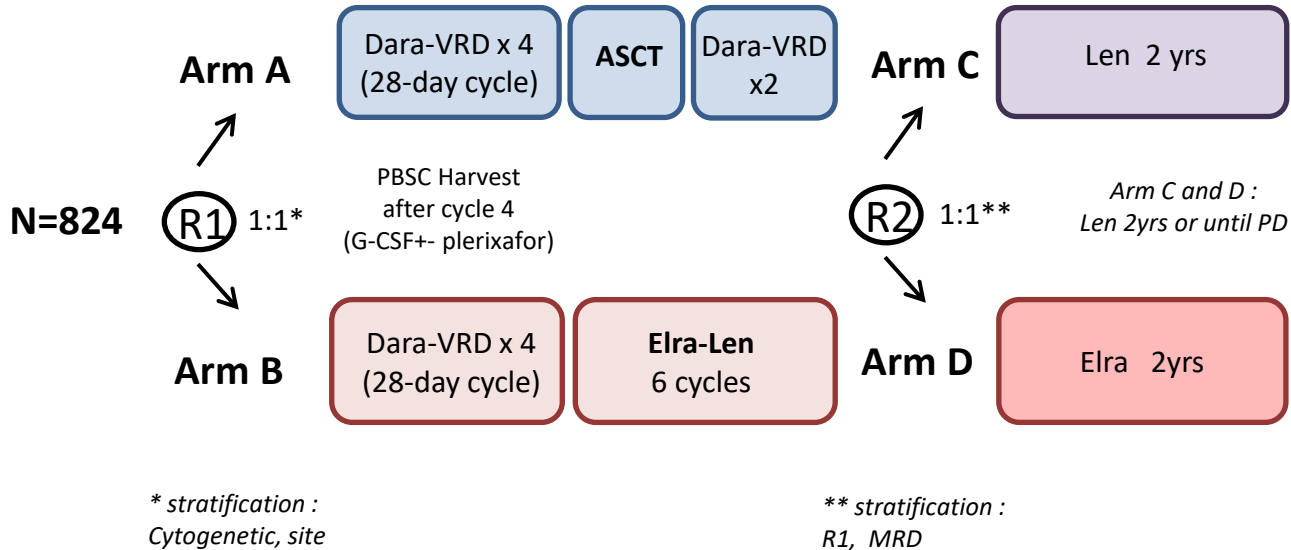
# To challenge ASCT with Bispabs

## Population



- NDMM
- Transplant eligible

## Study design



## Objectives

- **Primary :**
  - R1 : MRD (10-5) pré R2
  - R2 : PFS
- **Secondary:**
  - Sustained MRD
  - OS
  - Safety
  - QoL
  - Rework
- **Exploratory:**
  - genomic, immuno, PET, Mass spec, CTCs



# To challenge ASCT with Bispabs

**Study Objective: To demonstrate the efficacy and safety of Tec+DR induction therapy and fixed duration BsAb-Dara maint. post ASCT in TE NDMM patients**

## Inclusion Criteria:

- Newly diagnosed TE MM
- Age ≤ 70
- Eligible for ASCT
- ECOG 0 or 1

## Primary Endpoints:

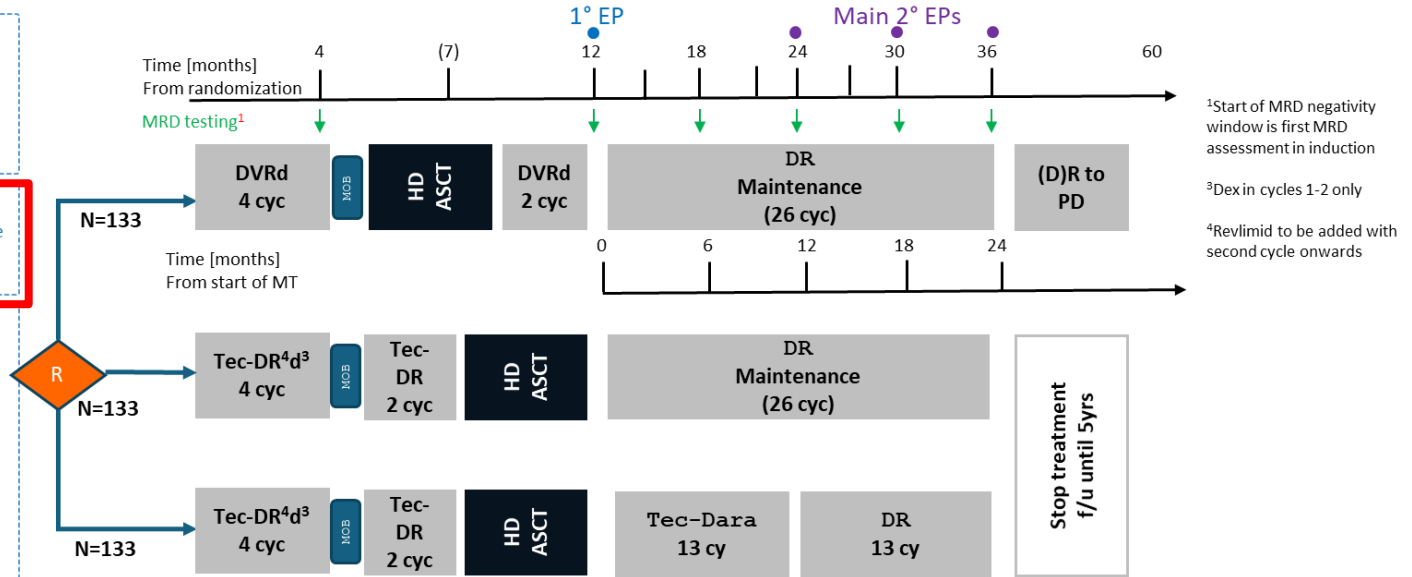
- VGPR/MRD neg. ( $10^{-6}$ ) pre maintenance (NGS) (Arm A vs Arm B+Arm C)

## Key Secondary Endpoints:

- Cumulative 12 months sustained CR/MRD negativity up to 24 months of maintenance ( $10^{-6}$ ) (Arm A vs Arm C)
- Event rate (descriptive only).  
Event defined as
  - a. Progression
  - b. Death
  - c. G3/4 infection
  - d. Discontinuation of all study drugs
- Best overall MRD neg.
- PFS (5 years)

## Stratification :

- Age (<65/≥65)
- HR/no HR (IMWG 2024 definition)



deutsche studien-gruppe  
multiples myelom

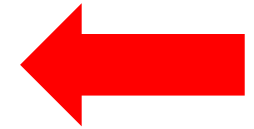
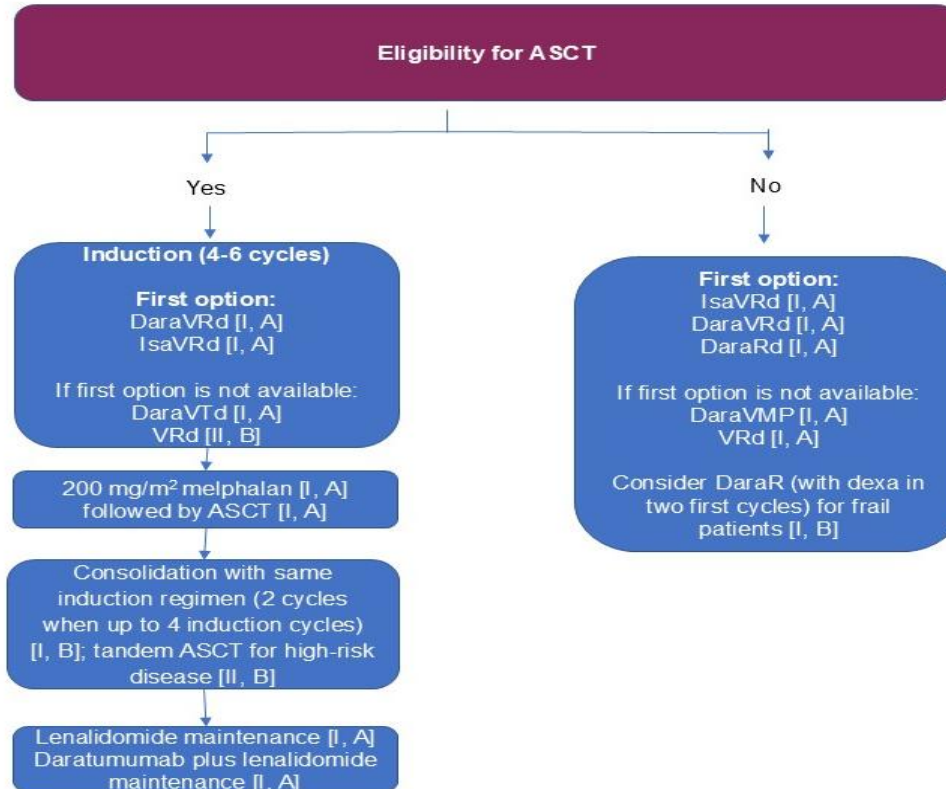
**dsmm**

doing studies on multiple myeloma



PI : Marc Raab, Leo Rasche

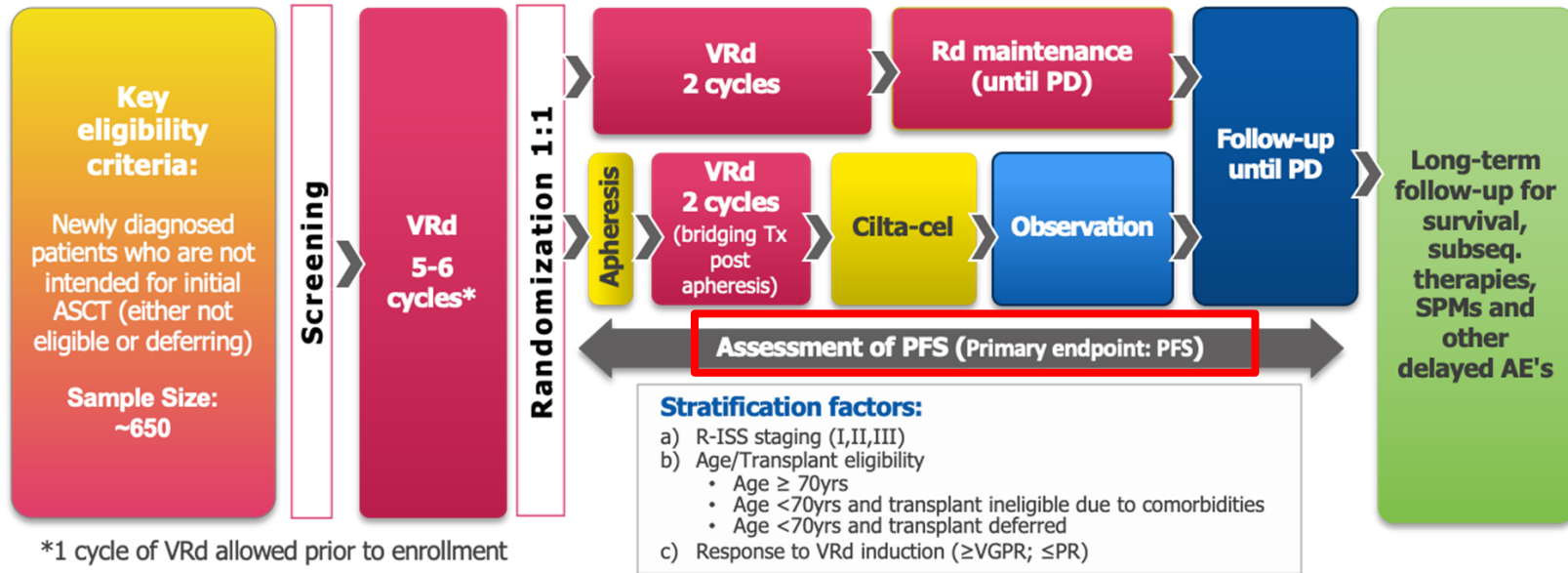
# International guidelines



**New trials  
In TI NDMM**

# New trials in TI NDMM : incorporation of TCR

## Frontline CAR-T cells in transplant ineligible patients CARTITUDE-5



## MajesTEC-7: Phase 3 Design

### Key eligibility criteria:

- NDMM either ineligible or not intended for ASCT
- ECOG PS status 0-2



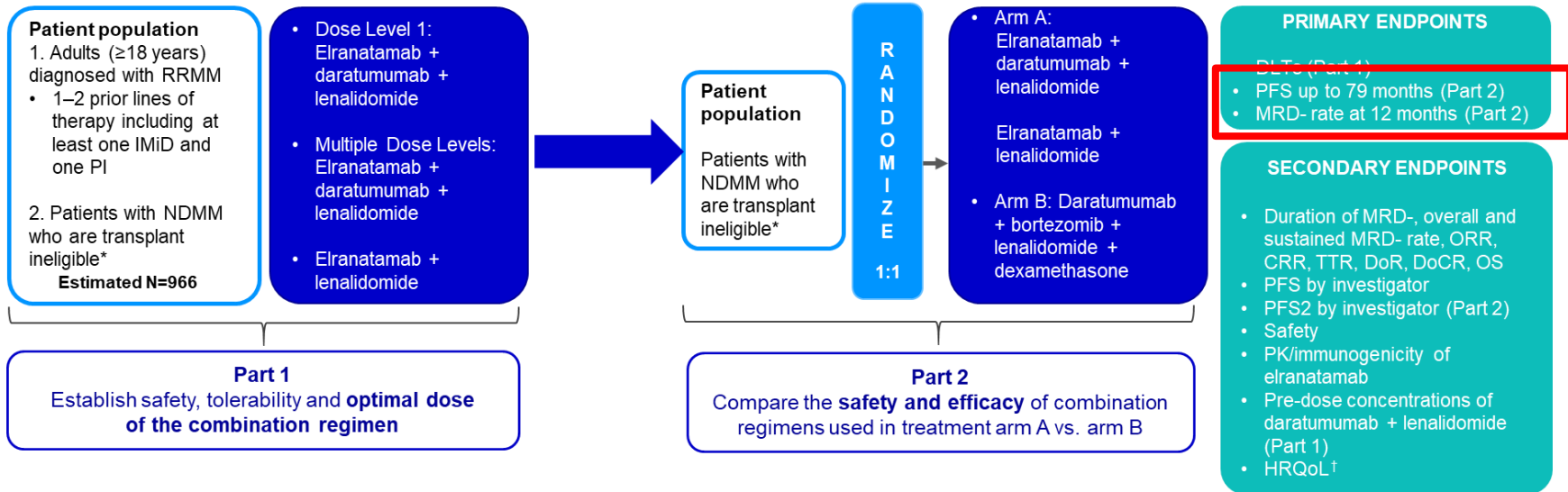
### Dual primary endpoints:

- PFS
- 12-mo MRD-neg CR

### Secondary endpoints:

- $\geq$ CR
- OS
- Sustained MRD-neg CR
- MRD-neg CR
- PFS2
- Safety
- PROs
- PK

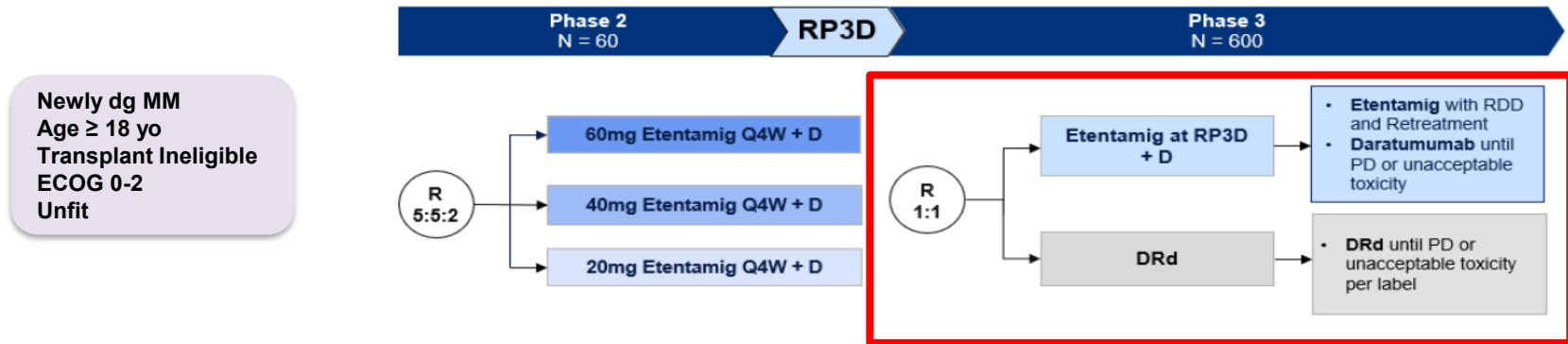
## MagnetisMM-6



# New trials in TI NDMM : incorporation of TCR

## IFM/PETHEMA Philae trial (M25-586): elderly unfit patients

Sponsor Abbvie - Collaboration IFM/PETHEMA  
Phase 3 randomized trial  
Response-adapted strategy



### Study Endpoints :

- **Dual Primary: PFS & MRDneg CR rate**
- **Key Secondary:** OS, 12m sustained MRDneg CR, Response rates ≥CR and ≥ VGPR
- **Other Secondary:** ORR, EFS, PFS2, Safety and Tolerability, PROs

*Ph2 start feb 2026*

### Response-directed discontinuation of etenta

- At least 24 cycles of etenta
- MRD neg CR, sustained MRD ≥12 months
- Continuation of dara

# CONCLUSION

Current standard of care allows median PFS > 10 years in TE NDMM and > 7 years in TI NDMM

New endpoints are therefore needed to accelerate access to therapeutic innovation

MRD- CR (at 9 or 12 months) has been endorsed by FDA as a valid endpoint for accelerated approval in MM.

Most ongoing ph3 trials in NDMM have MRD as co-primary endpoint

Key ongoing trials in NDMM are incorporating T-cell redirecting immunotherapies to improve efficacy, and potentially replace transplant in young patients

Thank you!

