

Proposed
Response/ Remission Criteria
at Interim & End of Treatment

Background

- Criteria is combining **metabolic** and **anatomical** assessment without **loss** of the information from either.
- Deauville criteria is used for **both** “interim” (iPET) and “end of treatment” (ePET).
- Criteria is maintaining the **flexibility** of the Deauville 5 point scale system.

Score 1 : no uptake

Score 2 : uptake \leq mediastinum

Score 3 : uptake $>$ mediastinum but \leq liver

Score 4 : moderately increased uptake $>$ liver

Score 5 : markedly increased uptake
AND / OR
new lesion(s) likely to be lymphoma

- Criteria is aimed for **clinical practice** and **phase III** clinical trials.
- Criteria does **not** tell us what to do (treatment decision). It simply describes response to treatment.
- If important treatment changes are to be made, **biopsy** may be still indicated.
- Criteria is based on current knowledge & are likely to require **updating** on regular basis with new information emerging.

Difference of iPET & ePET

- **iPET**

- Early during Rx
- Assessing early **response** (chemo sensitivity)
- Aim: Demonstrate response and its **degree** (i.e. complete vs partial)

- **ePET**

- After Rx
- Assessing **remission** status (final outcome)
- Aim: Complete Metabolic Response

RESPONSE ASSESSMENT WITH INTERIM PET	PET FINDINGS	REMISSION ASSESSMENT WITH END PET	PET-CT FINDINGS
Complete Metabolic Response CMR	DS 1,2,3	Complete Metabolic Response CMR CMR with a residual mass = CMRr & size of the mass recorded	DS 1,2,3* ± residual mass + no evidence of disease in marrow †, spleen or other extranodal sites **
Partial Metabolic Response PMR	DS 4 or 5 & reduced uptake from baseline	Residual metabolic disease RMD	DS 4 or 5 & residual mass of any size (but no new lesions)
No Metabolic Response or Progressive Metabolic Disease NMR/PMD	DS 5 & - no significant change in uptake or - new FDG avid foci consistent with lymphoma	Progressive metabolic disease PMD	DS 4 or 5 & - new FDG avid foci consistent with lymphoma or - increase in uptake in previous disease foci &/or - increase ≥50% SPD of masses

Qualifying remarks

- **DS 3** probably represents **CMR** but in **response adapted trials** involving PET where de-escalation of therapy is intended, it may be preferred to use DS **1,2** to define CMR to **increase the NPV** of PET and avoid the risk of under- treatment of disease (category 3).

† **Bone marrow** involvement at diagnosis on BMB requires clearance of marrow infiltration for definition of CMR.

** In **Waldeyers ring** or in **extranodal sites** e.g. gut, liver and marrow, FDG uptake may be > mediastinum with CMR but should be no > than surrounding normal physiological uptake. This is seen often with marrow activation following chemotherapy or granulocyte stimulating factor.

3 Response Categories

- CMR
- Partial metabolic response:
 - **iPET**: responding but not completely (further Rx will be given).
 - **ePET**: Residual disease after completion of Rx
- Lack of response/progression