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NCG Plastic and Reconstructive Surgery Guidelines 2024

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INDEX

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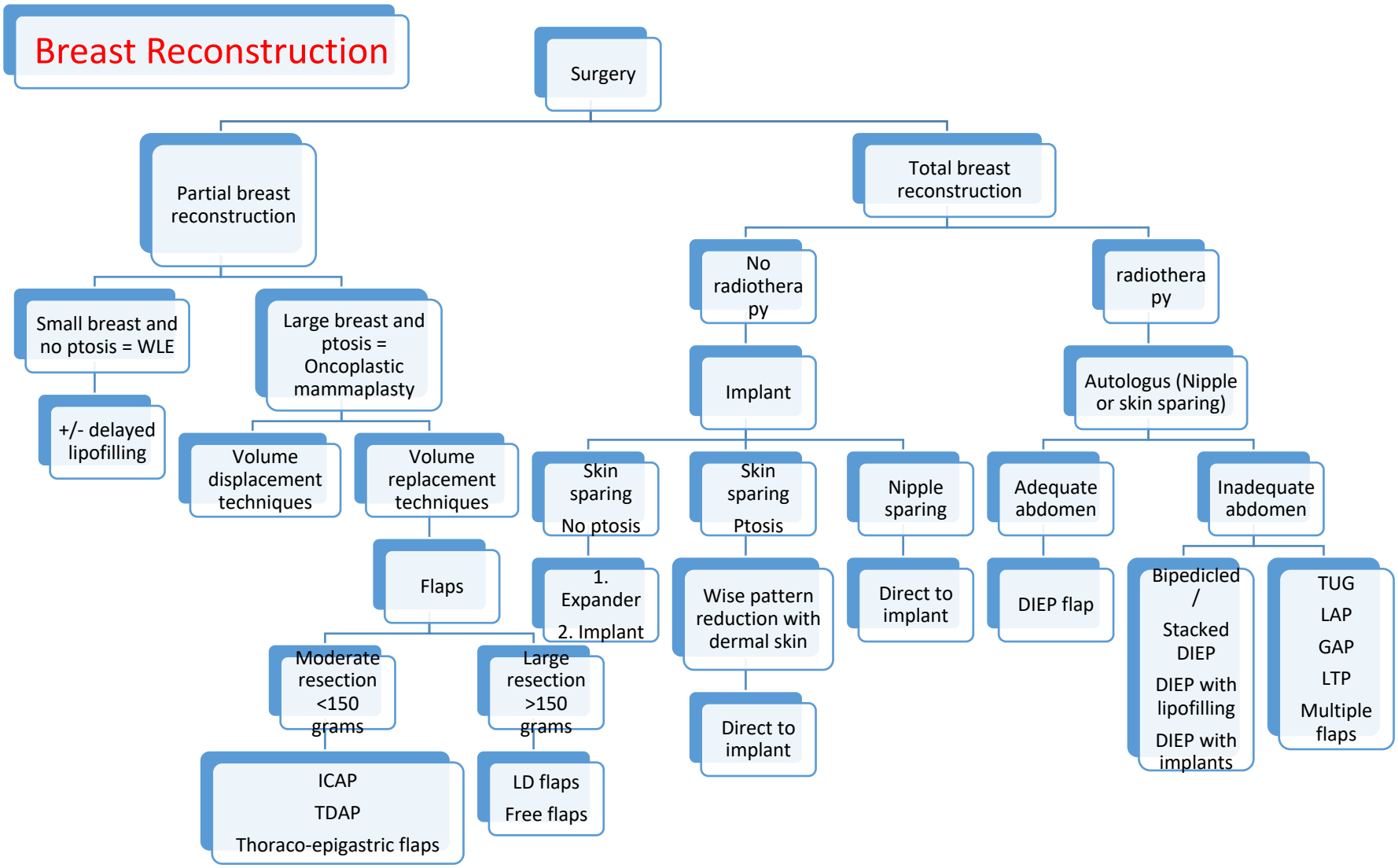
Breast Reconstruction
Surgery
Partial breast reconstruction
Total breast reconstruction
Small breast and no ptosis = WLE
+/- delayed lipofilling
Large breast and ptosis = Oncoplastic mammaplasty
Volume displacement techniques
Volume replacement techniques
Flaps
Moderate resection <150 grams
Large resection >150 grams
ICAP
TDAP
Thoraco-epigastric flaps
LD flaps
Free flaps
No radiotherapy
radiotherapy
Implant
Autologus (Nipple or skin sparing)
Skin sparing No ptosis
Skin sparing Ptosis
Nipple sparing
Adequate abdomen
Inadequate abdomen
1. Expander 2. Implant
Wise pattern reduction with dermal skin
Direct to implant
Direct to implant
DIEP flap
Bipedicled / Stacked DIEP
DIEP with lipofilling
DIEP with implants
TUG
LAP
GAP
LTP
Multiple flaps

Legends-

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ICAP- Inter-coastal artery perforator
TDAP- Thoracodorsal artery perforator
LD- Latissimus dorsi
DIEP- Deep inferior epigastric artery perforator
TUG- Transverse upper gracilis
LAP- Lumbar artery perforator
GAP- Gluteal artery perforator
LTP- Lateral thorasic perforator

- Breast Reconstruction

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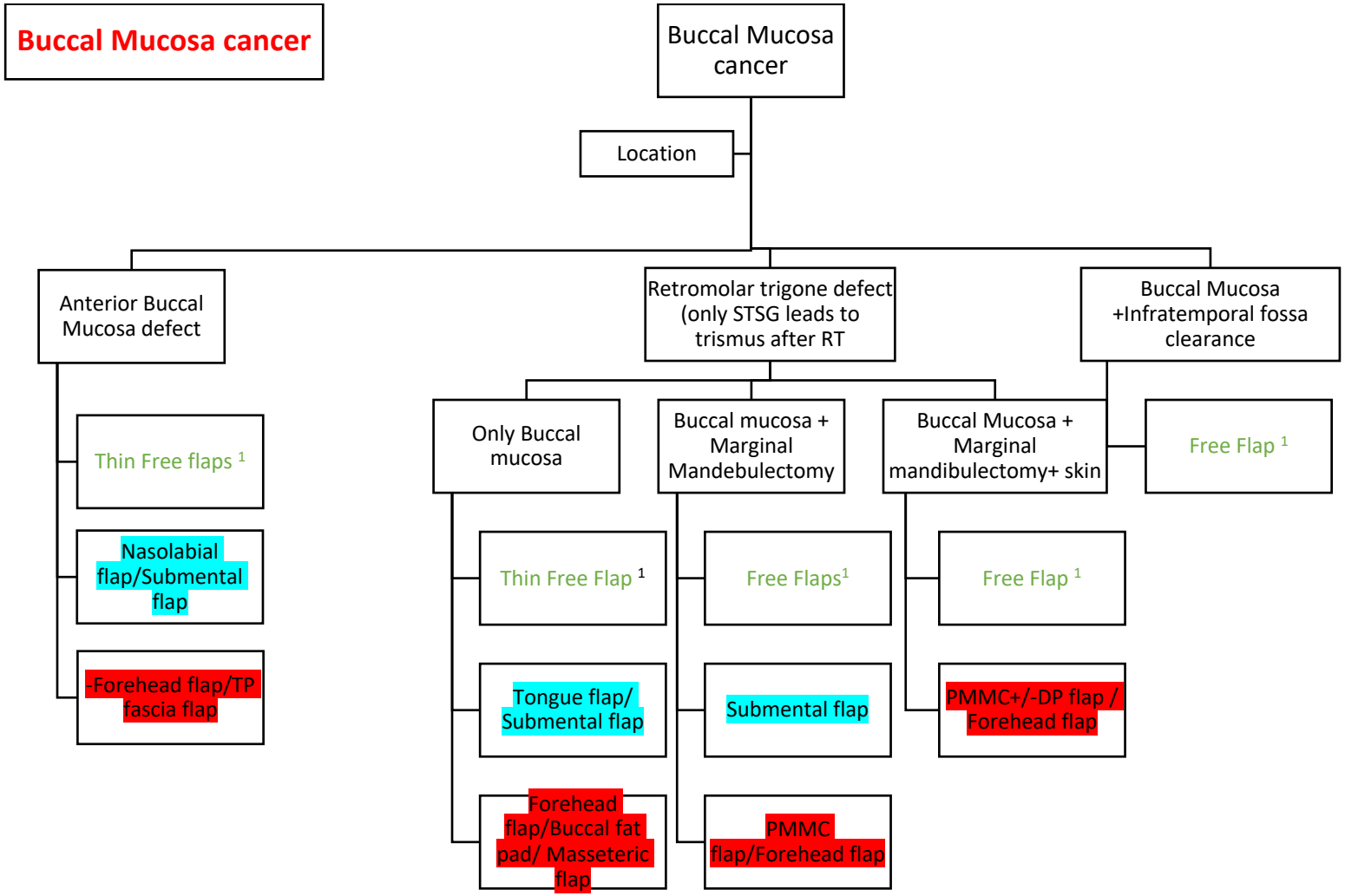

- Green signifies best/preferred option, Blue signifies- resource based options, Red signifies salvage options
- 1- FRAFF/FALT/TDAP/MSAP – depending on thickness and pliability of donor site. Flap should provide adequate bulk

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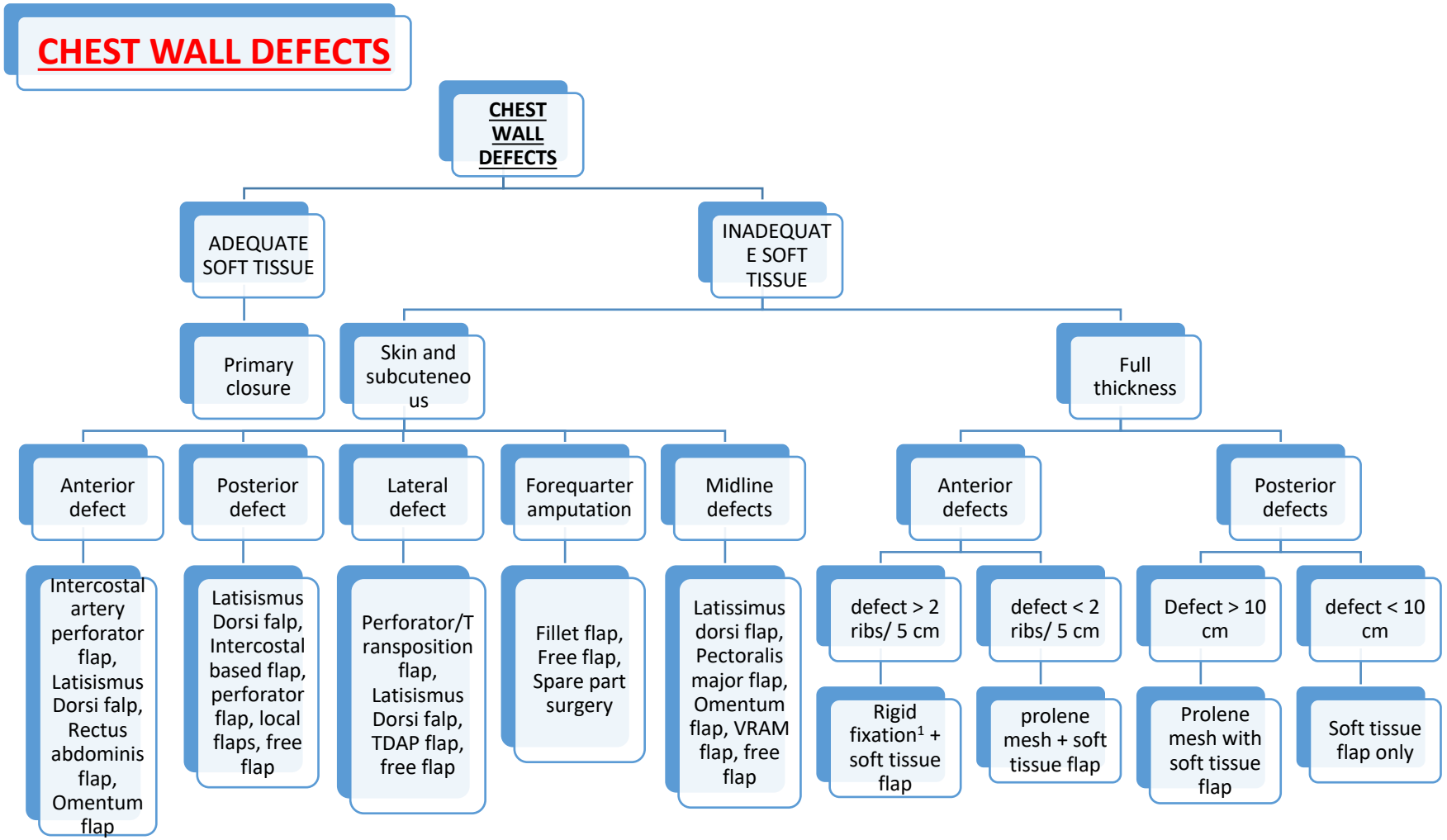

1. Options for rigid fixation- Mesh cement sandwich, titanium mesh, titanium plate, autograft, allograft

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2. Split thickness skin graft is an option if the bed is graftable and adjuvant radiation is not required

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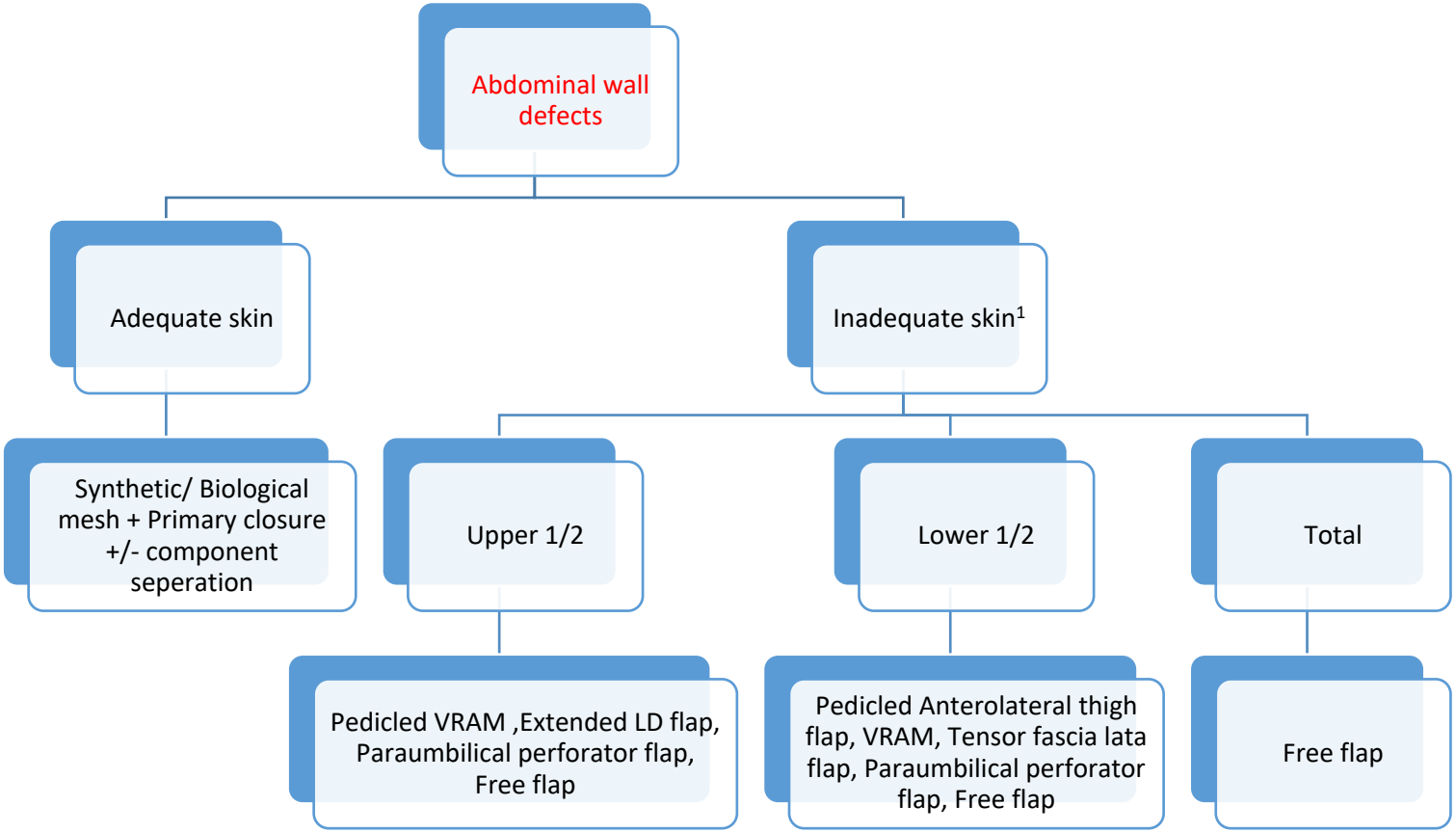

1. Biological or synthetic mesh is used for rectus defects.

Legends-

TDAP flap- thoracodorsal artery perforator flap
VRAM flap- Vertical rectus abdominis muscle falp
LD- latissimus dorsi flap

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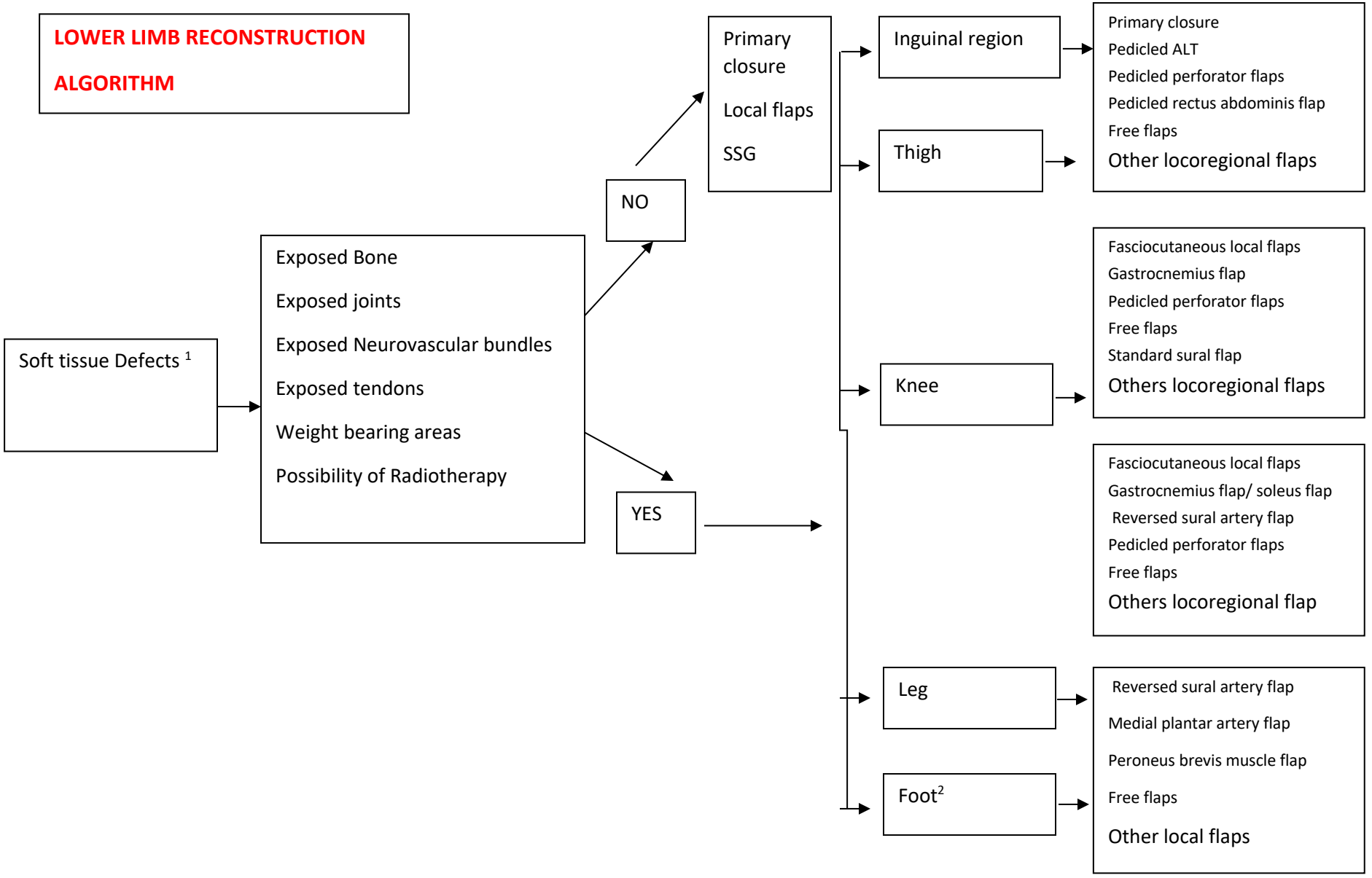
LOWER LIMB RECONSTRUCTION ALGORITHM



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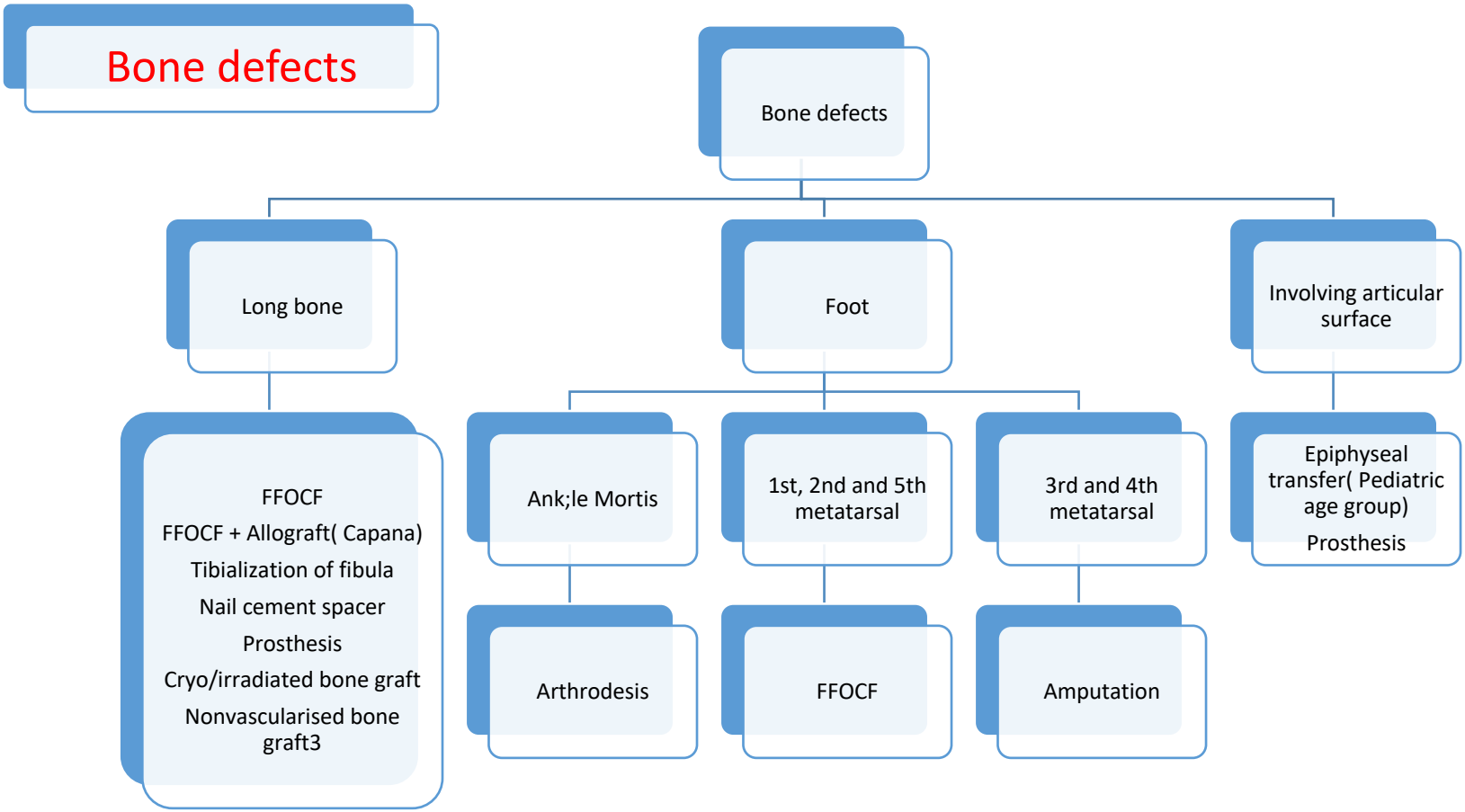

- If long segmental loss of nerve or muscle compartment resection resulting in loss of function then tendon transfer, nerve transfer or functional muscle transfer can be considered
- STSG can be considered in instep area. Flap should be first choice in weight bearing areas
- Non vascularized bone graft may be used in defects < 6 cms in which bed vascularity is good. To be avoided if wound bed is infected/radiated or likely to receive radiation

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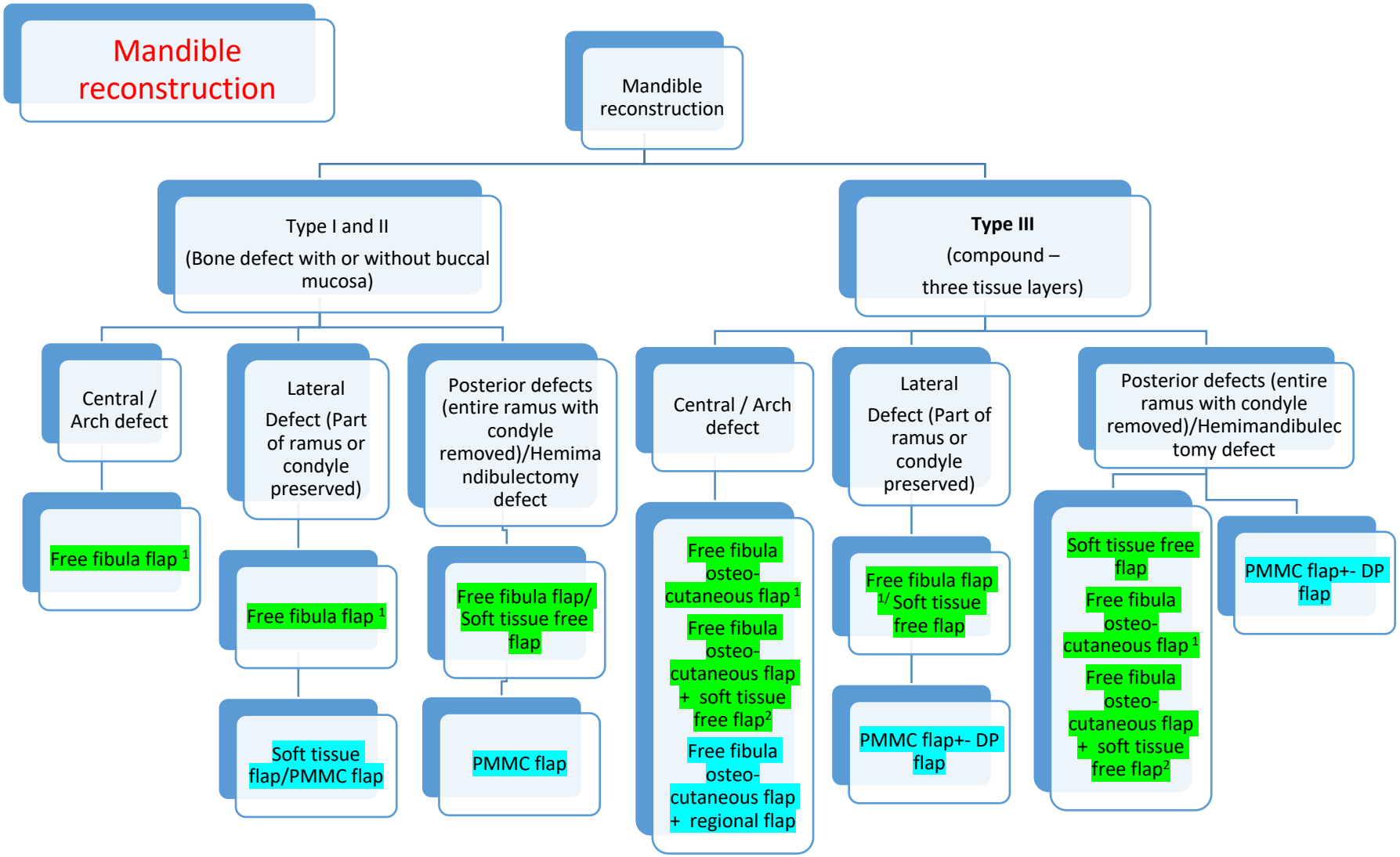

- Green signifies best/preferred option, Blue signifies- resource based options, Red signifies salvage options

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1. Free fibula osteocuteneous flap is first and preferred choice for bone reconstruction.Although depending upon surgeon's preference, donor site availability and defect, other bone flaps can also be an option such as
    A) Free scapular parascapular flap
    B) DCIA flap
2. If skin defect requirement is huge and one flap is not enough to provide the skin paddle, different combinations are possible such as two free flaps, or one free flap and one regional flap. In salvage situations plate with free flap or regional flaps is also an option.
3. Legends-
    A) PMMC- Pectoralis major myocutaneous flap
    B) DP flap- deltopectoral flap

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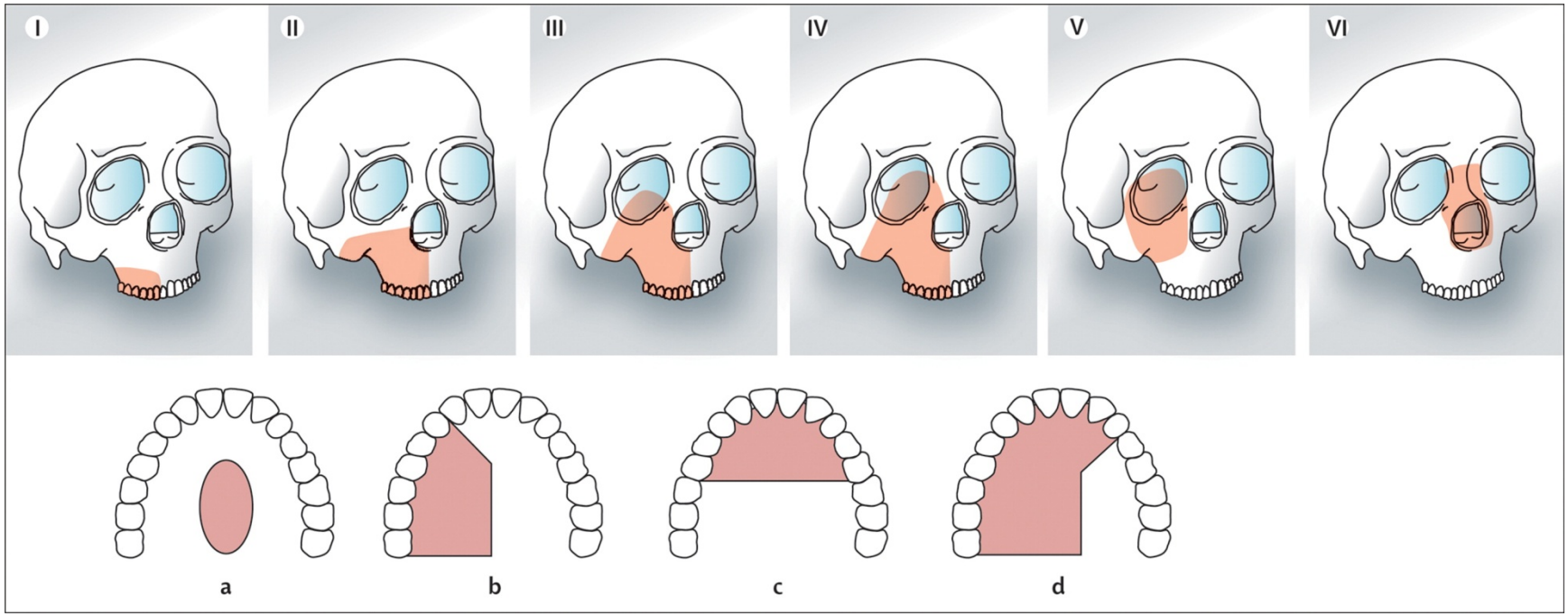
Revised James Brown classification-



Classification of vertical and horizontal maxillectomy and midface defect
Vertical classification: I—maxillectomy not causing an oronasal fistula; II—not involving the orbit; III—involving the orbital adnexae with orbital retention; IV—with orbital enucleation or exenteration; V—orbitomaxillary defect; VI—nasomaxillary defect. Horizontal classification: a—palatal defect only, not involving the dental alveolus; b—less than or equal to 1/2 unilateral; c—less than or equal to 1/2 bilateral or transverse anterior; d—greater than 1/2 maxillectomy. Letters refer to the increasing complexity of the dentoalveolar and palatal defect, and qualify the vertical dimension.
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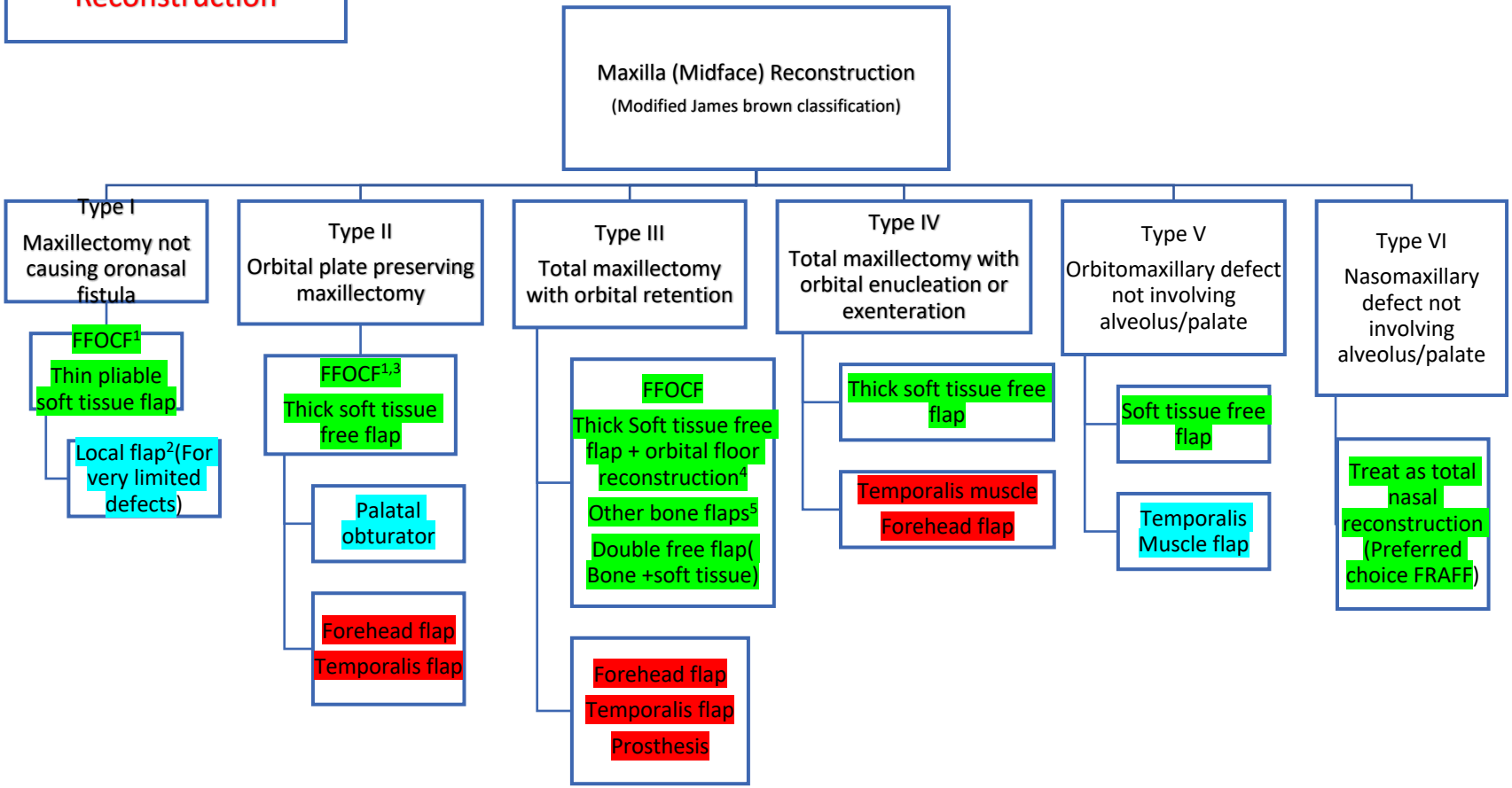
Maxilla (Midface) Reconstruction



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1. When defect is crossing midline, FFOCF is preferred over soft tissue flaps
2. If defect is posterior to canine, soft tissue flap is preferred
3. Local flap options – Nasolabial, palatal flap, temporalis flap
4. Other bone flaps can also be considered depending on surgeon preference- eg DCIA flap, Scapular flap
5. Options for orbital floor reconstruction- Non vascularized bone graft (Autograft), Titanium mesh etc

Legends-

1. FFOCF- free fibula osteocutaneous flap
2. FRAFF- free radial artery forearm flap

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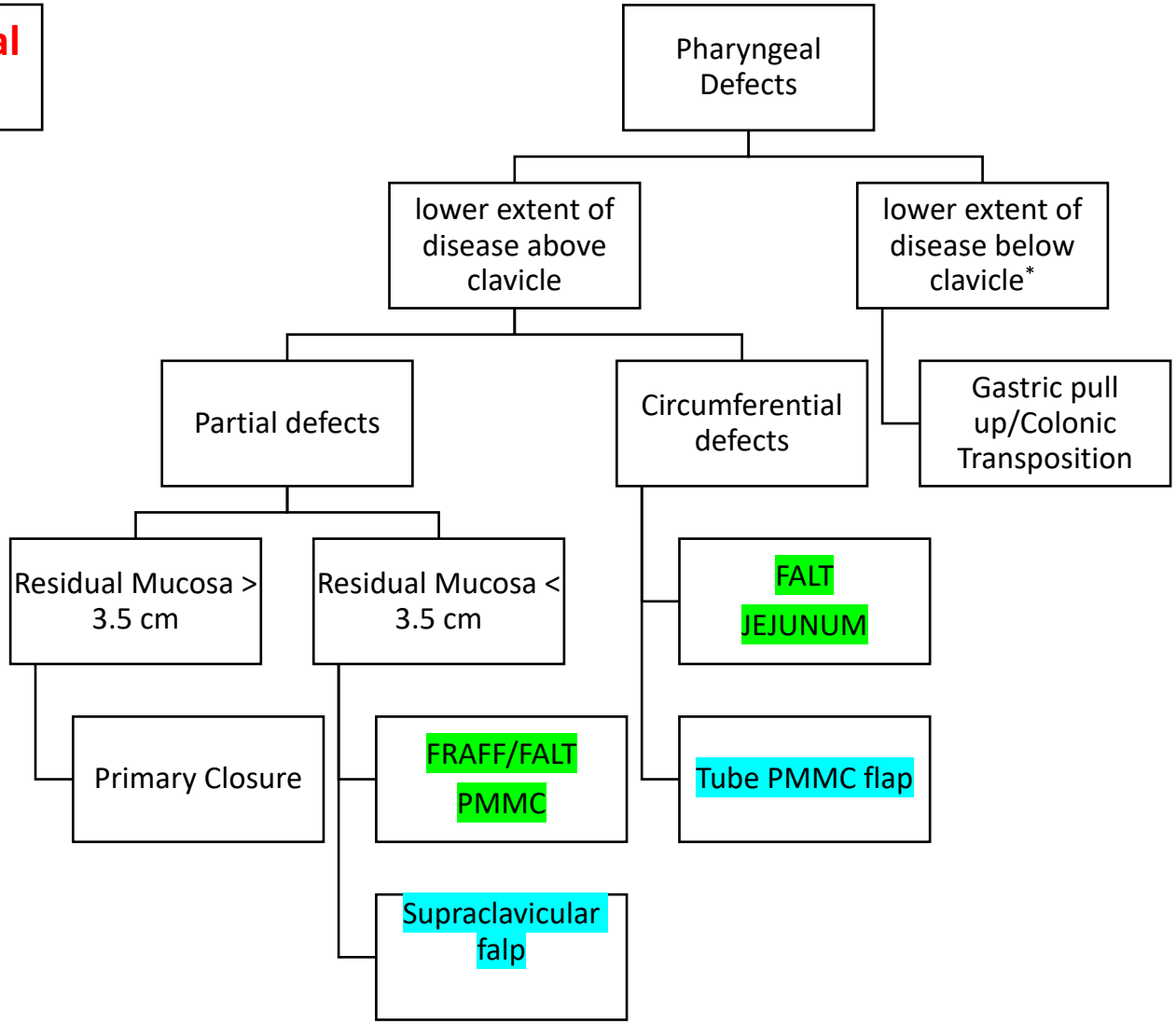
Pharyngeal Defects



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Legends-

FALT- Free anterolateral thigh flap
PMMC- Pectoralis Major myocutaneous flap

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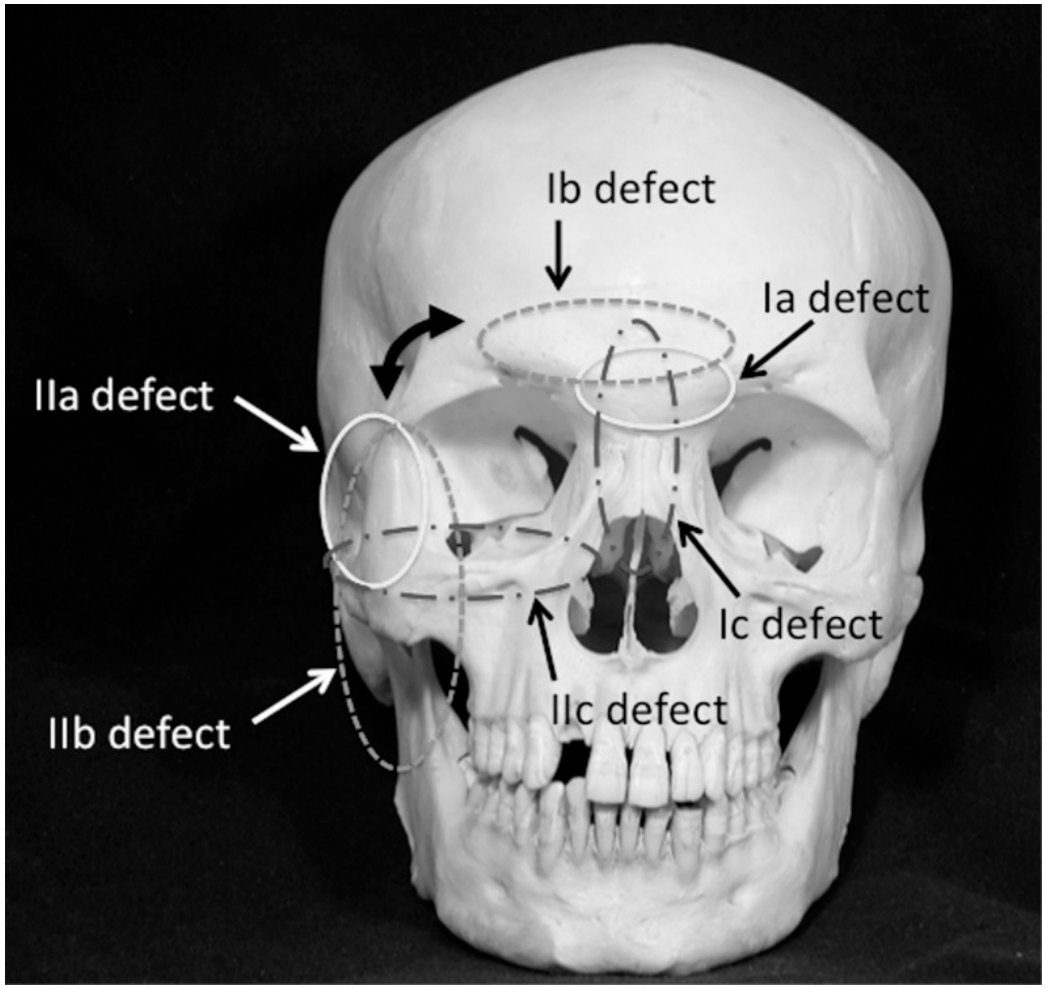
Classification:



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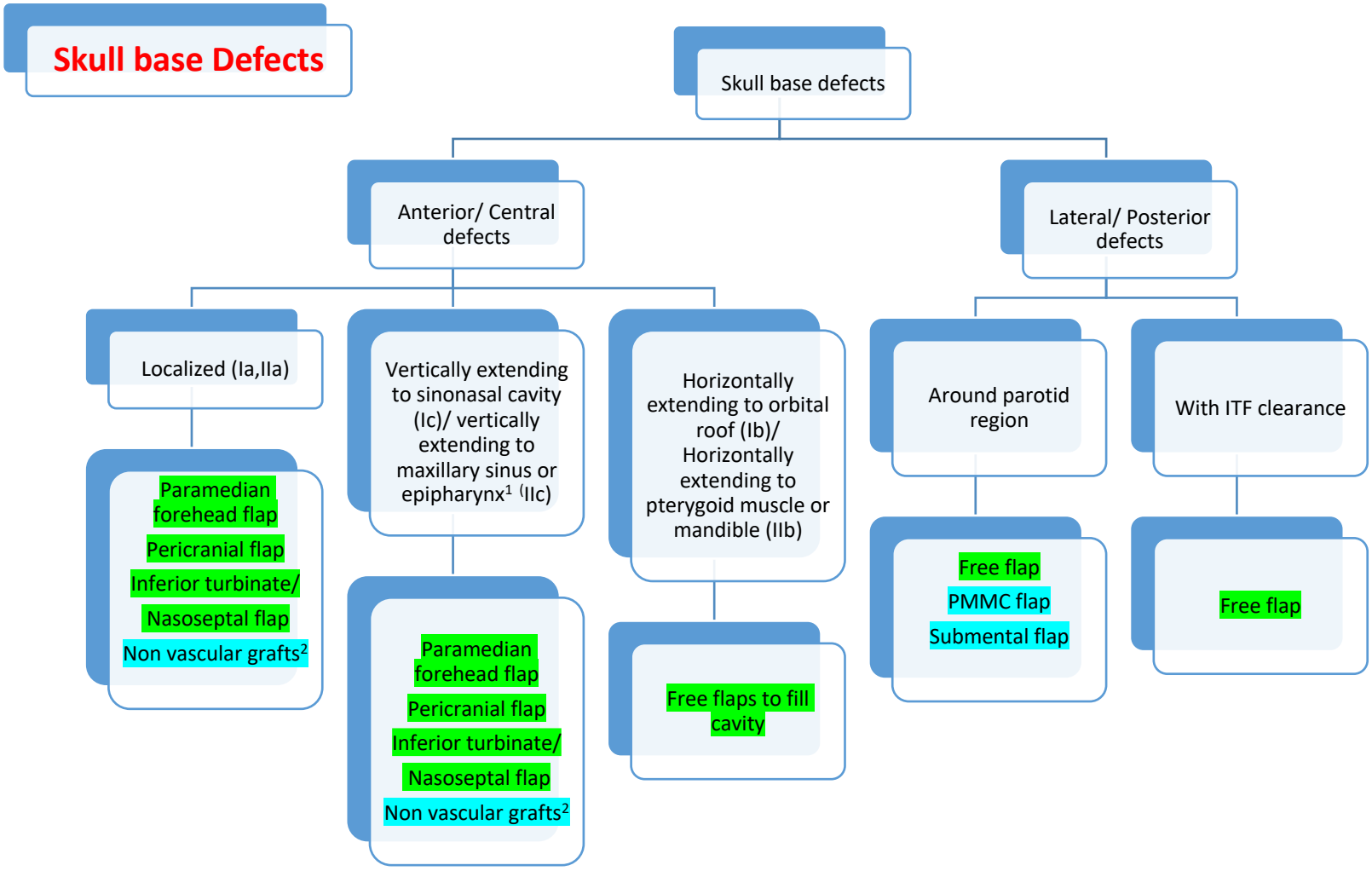

1. Defects involving orbital contents or skin involvement, free flap is the preferred reconstructive choice

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2. Non vascularized grafts should be avoided if post operative radiation is anticipated

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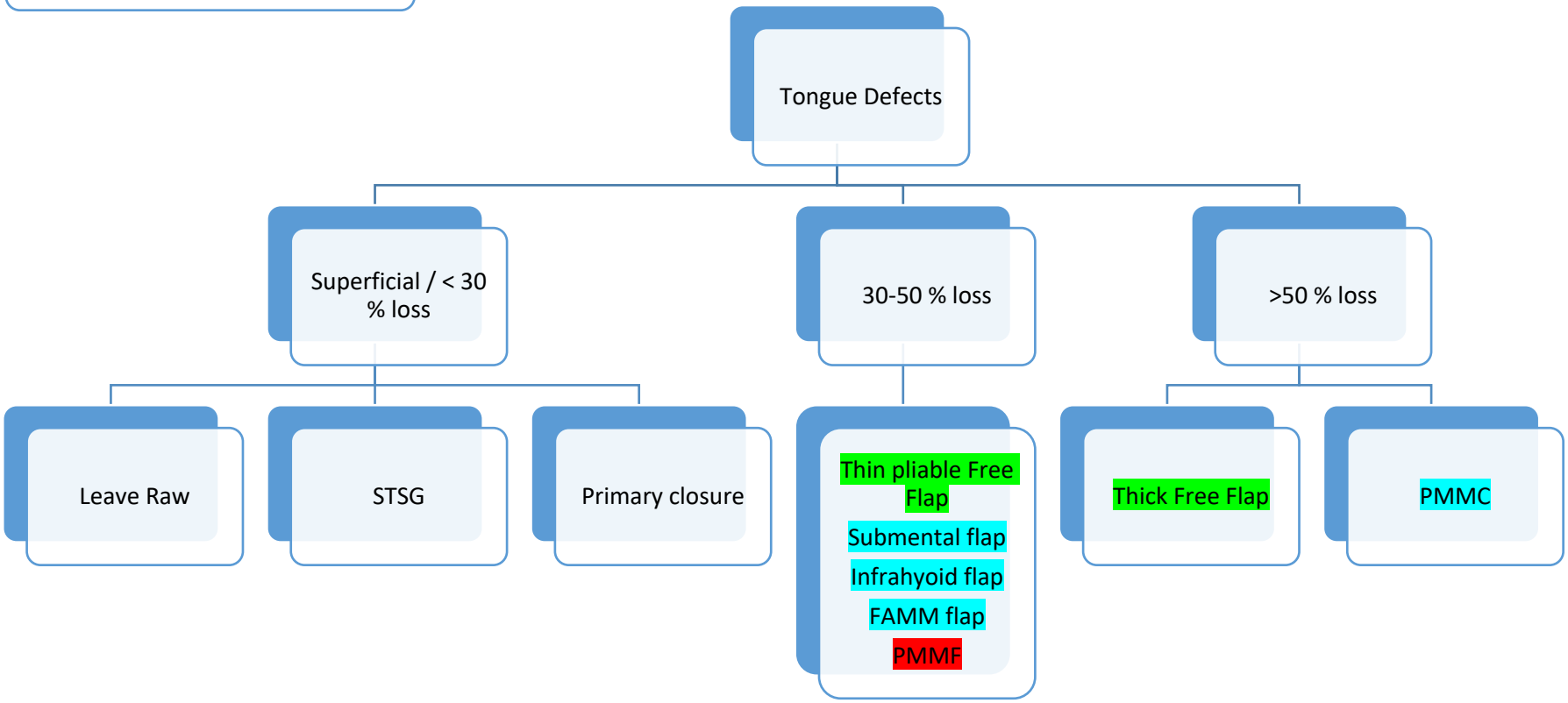
Tongue Defects



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Legends

STSG- Split thickness skin graft
FAMM- Facial artery myomucosal flap
PMMF- pectoralis major muscle flap
PMMC- pectoralis major myocutaneous flap

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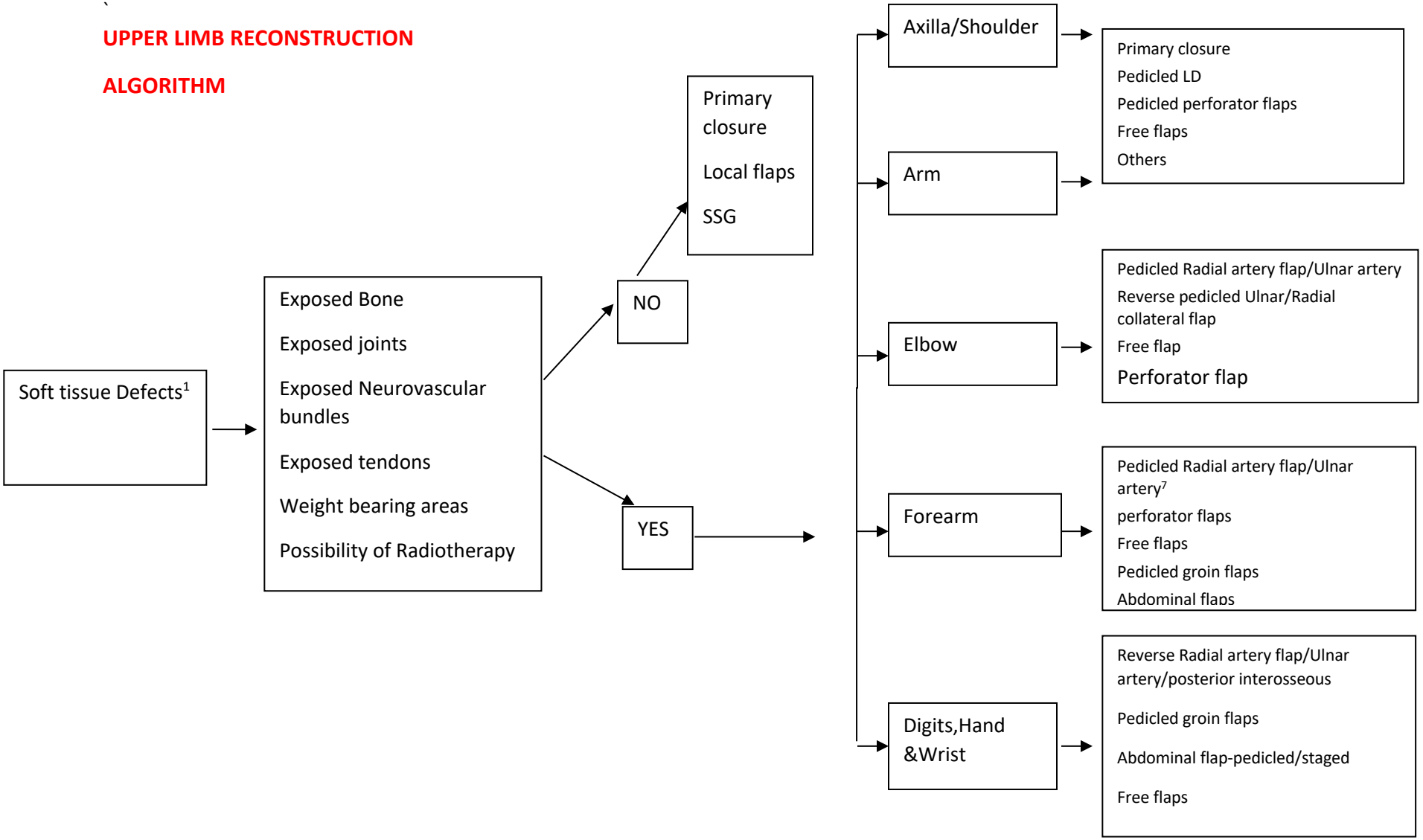
UPPER LIMB RECONSTRUCTION

ALGORITHM



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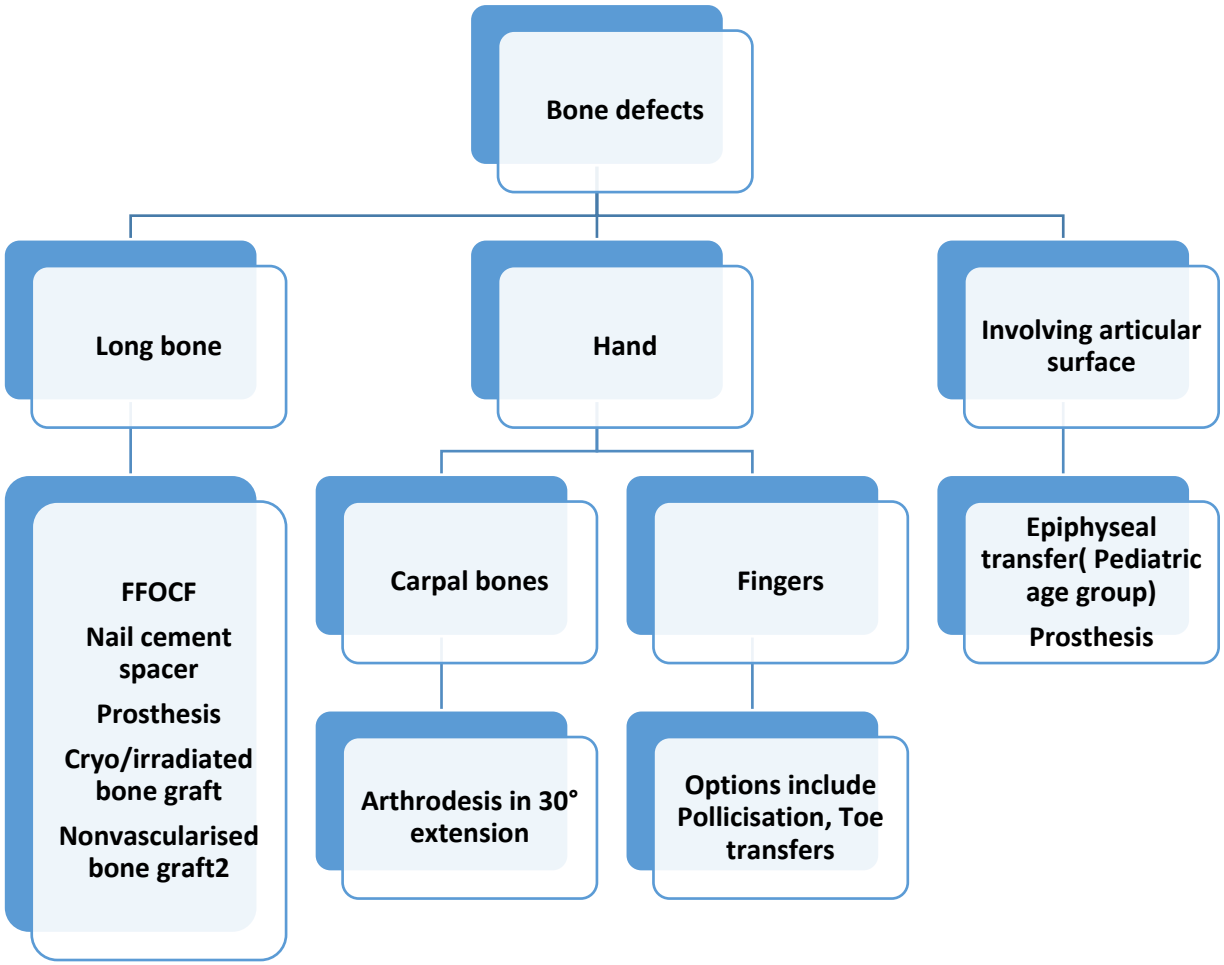

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If long segmental loss of nerve or muscle compartment resection resulting in loss of function then tendon transfer, nerve transfer or functional muscle transfer can be considered

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