

# INNOVATIVE RECONSTRUCTIVE STRATEGIES IN BREAST CANCER SURGERY

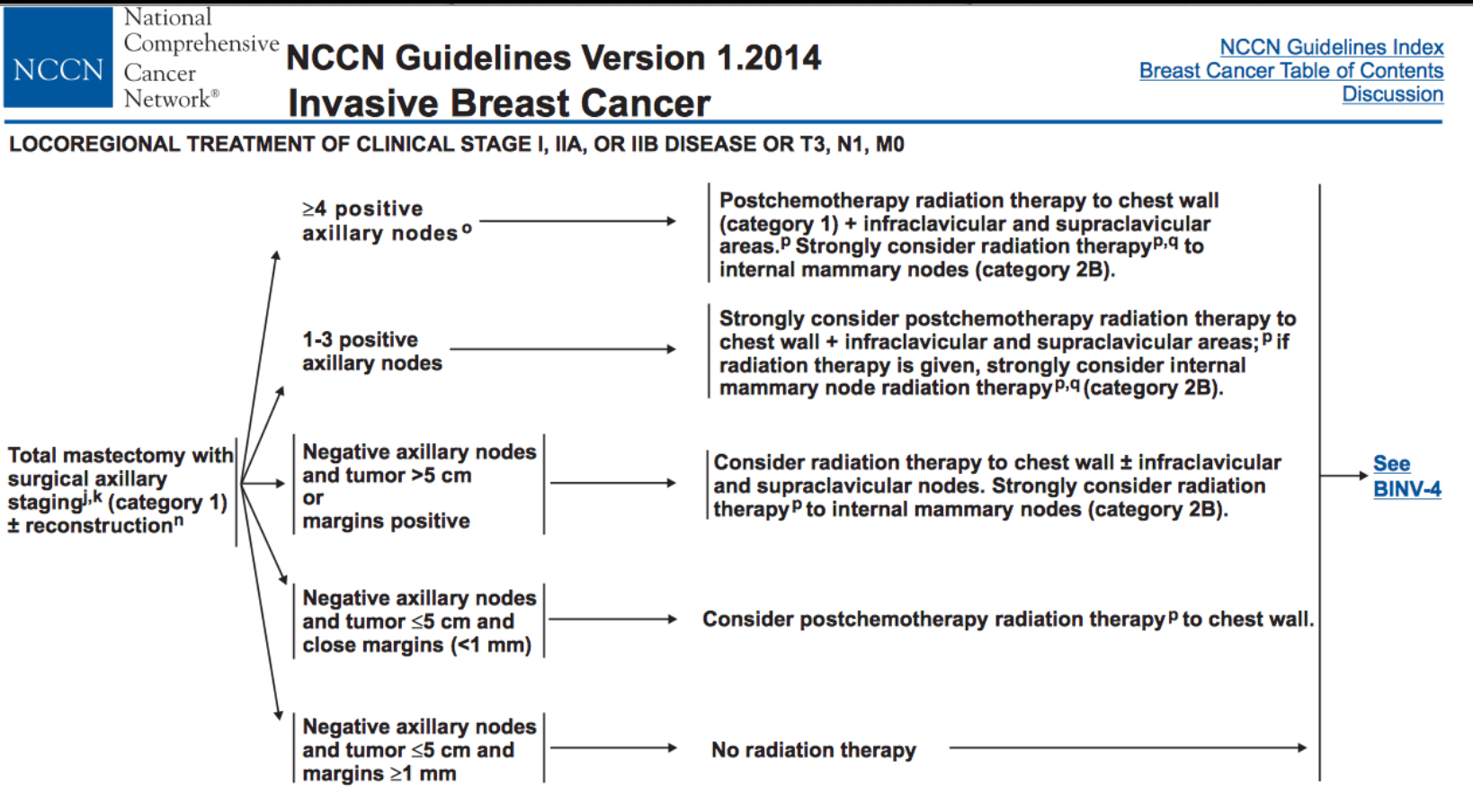
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A MODEL TO IMPROVE PATIENT CARE

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# WHEN RADIATION IS NECESSARY AFTER MASTECTOMY RECONSTRUCTION

- NCCN GUIDELINES FOR USE OF RADIATION AFTER MASTECTOMY



# CONSIDERATIONS REGARDING RECONSTRUCTION IN THE POST MASTECTOMY PATIENT REQUIRING RADIATION

The interdisciplinary approach

Timing of other adjuvant therapies

assessing the response of the tumor to chemotherapy

Preexisting medical/social conditions

Preexisting breast surgeries

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# CONSIDERATIONS REGARDING RECONSTRUCTION IN THE POST MASTECTOMY PATIENT REQUIRING RADIATION

## Timing of other adjuvant therapies

- Is the patient very sick?
- Does the patient have preexisting other complicating conditions?
- Did the patient have prior breast surgeries?
  - Augmentation, mastopexy, periareolar incisions

# POST MASTECTOMY PATIENT WITH RADIATION PLANNED, RECONSTRUCTION STRATEGIES

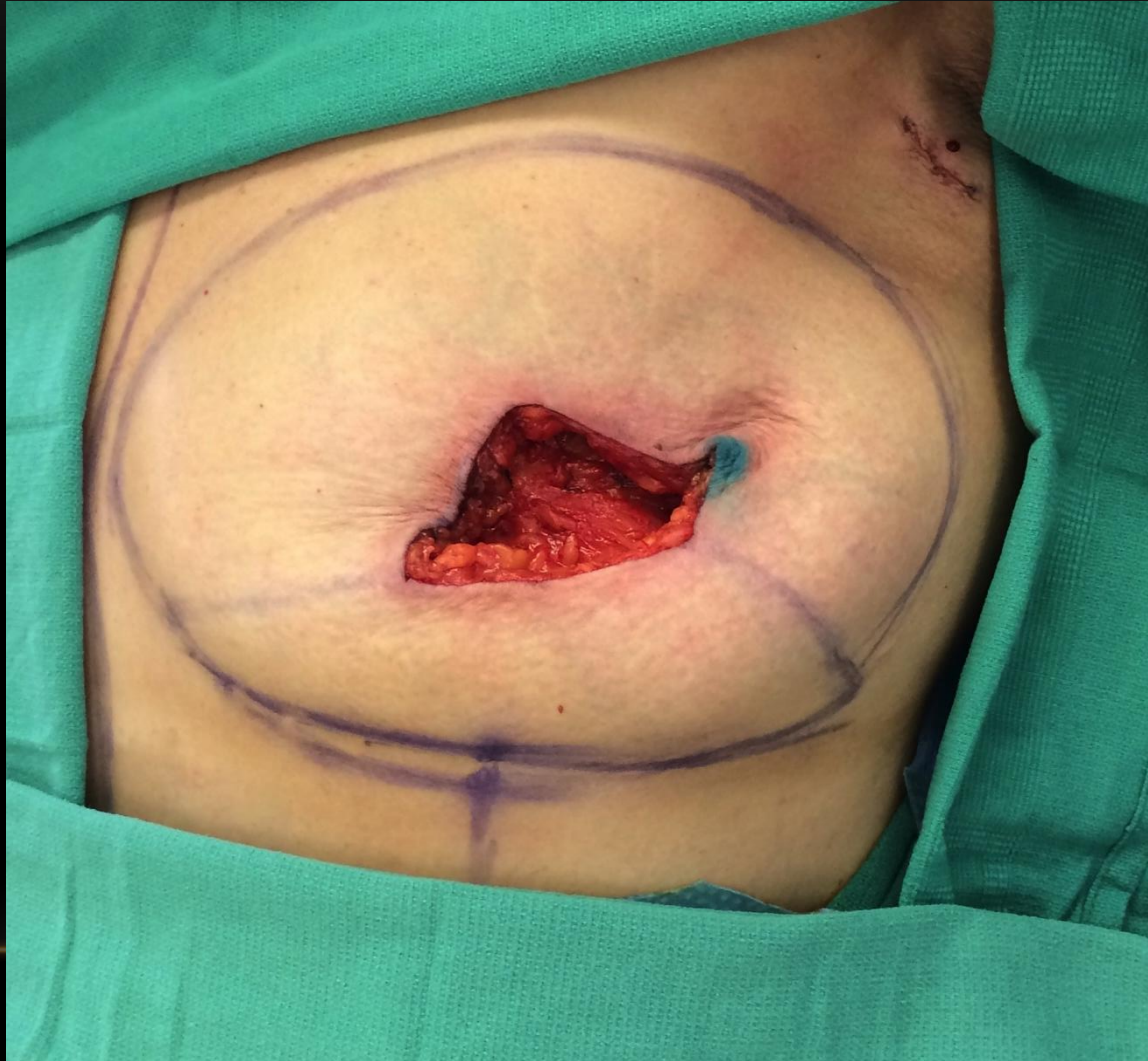
- Do cancer side only at initial surgery
- Decide whether or not nipple sparing attempt is feasible
- Decide whether patient would benefit from mastopexy
- Plan for staged approach with implant or tissue expander first, tissue transfer after radiation therapy is complete
- Decide whether alloderm or autoderm would benefit patient
- Understand if further chemotherapy is planned after surgery or if patient will proceed to radiation therapy

# FOR NON NIPPLE SPARING WITH MASTOPEXY MASTECTOMY, RADIATION PLANNED

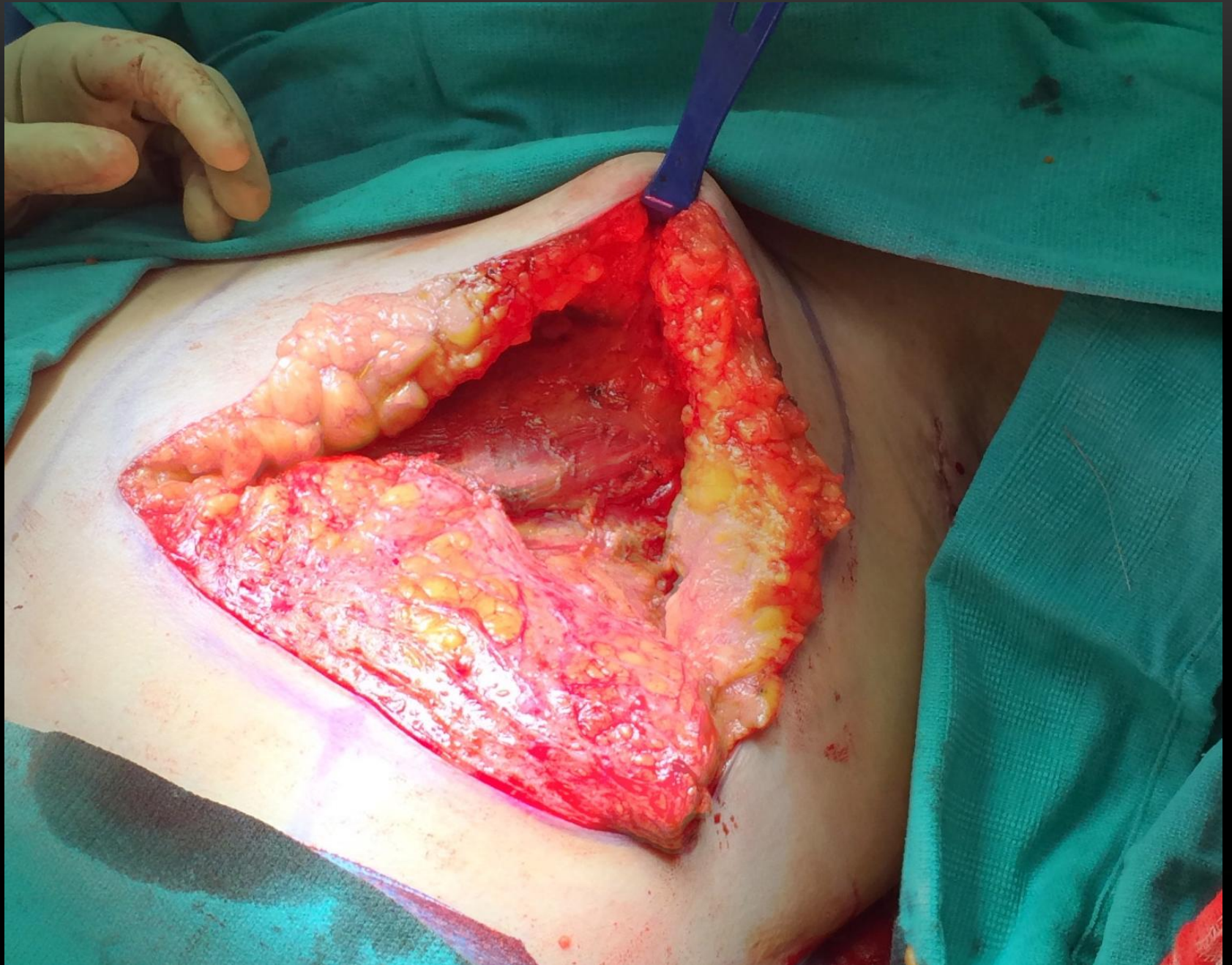
- Modified Wise pattern incision
- Deepithelialization
- Autoderm
- Implant or expander

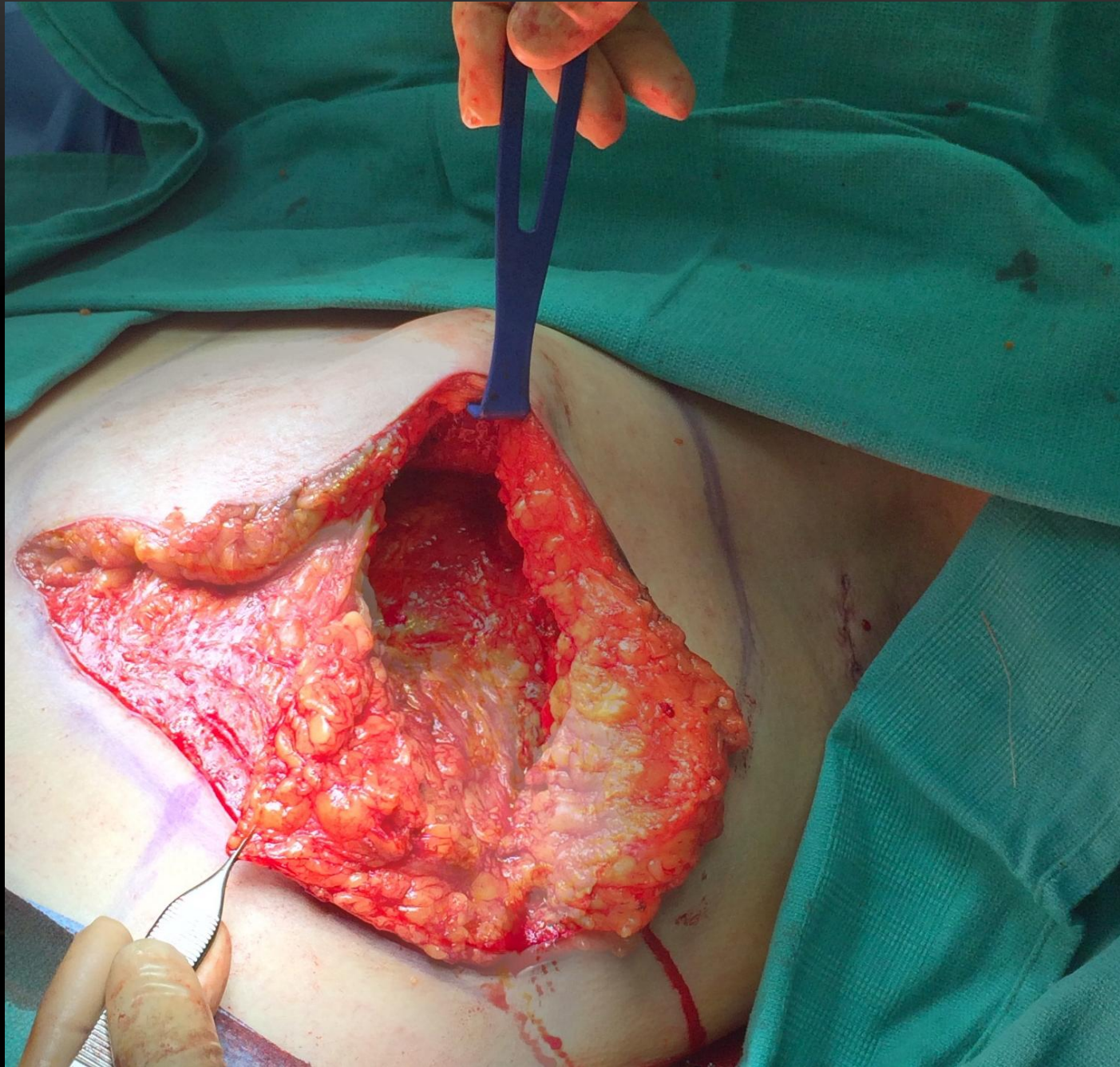
# MARKINGS FOR MASTECTOMY WITH MASTOPEXY WITH AUTODERM











# AUTODERM AND EXPANDER



APPROXIMATED CLOSURE OF INCISION  
EPITHELIALIZED SKIN FLAP FOLDED UNDER



# AUTODERM 1 WEEK POST OP





# AUTODERM, NO RADIATION



# AUTODERM, NO RADIATION





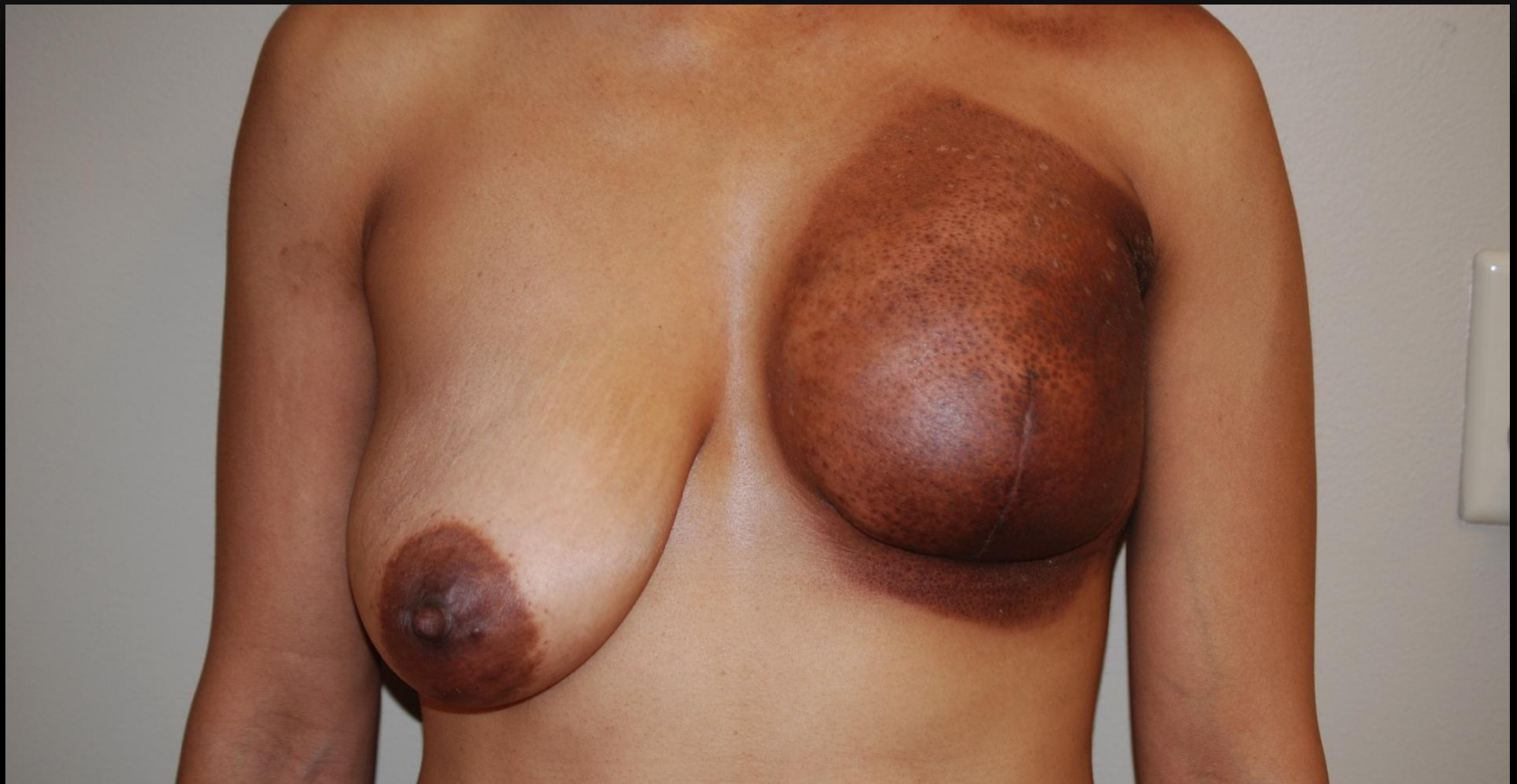
# AUTODERM, NO RADIATION



# RADIATION PLANNED AFTER MASTECTOMY

- Use implant or expander first
  - Delay tissue reconstruction for after the radiation therapy is completed
  - Do only cancer side at the time of the first mastectomy surgery and stage the non cancer side for a later date
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# AUTODERM, IMPLANT AND RADIATION



AFTER HEALING



# AUTODERM WITH RADIATION TO RIGHT



# NIPPLE SAVING SURGERY

- To spare the nipple or not
  - Preexisting ptosis
  - Extent of disease
  - Response of disease to neoadjuvant chemotherapy
  - Need for post operative radiation
  - Proximity of disease to nipple areolar complex
- Nipple removal can be done at a later date if pathology reveals unfavorable characteristics, to allow restoration of blood flow to areolar area
- With nipple sparing, alloderm can be used to thicken the covering of the implant or expander

# NIPPLE SPARING MASTECTOMY WITH ALLODERM, POST RADIATION



# IMPLANT WITH ALLODERM, IMMEDIATELY AFTER RADIATION





# AFTER SOME HEALING



# TISSUE TRANSFER AFTER RADIATION THERAPY



FAILED NON NIPPLE SPARING MASTECTOMY  
AFTER IMPLANT RECONSTRUCTION AND  
RADIATION WITH *INFECTION* AND *IMPLANT  
EXTRUSION*



# DIFFICULT LONG RECOVERY WITH SECONDARY INTENTION, WOUND PACKING



# TRADITIONAL NON SKIN SPARING MASTECTOMY



TISSUE RECONSTRUCTION  
AFTER CHEST WALL RADIATION  
AFTER TRADITIONAL NON SKIN SPARING





# PARADIGM SHIFT IN BREAST CANCER

- Many patients with advanced disease have many years of life left to live.
- Advanced cancer is understood more and more as a chronic disease state and it is difficult to predict which patients will live despite advanced stage at the time of initial diagnosis.
- Survivorship is essential but not thoroughly understood
- We have often dismissed the psychological needs of our patients as being secondary to the attempt to cure the cancer.
- Survival is likely unaffected by these advanced reconstruction techniques.
- Patients deserve our best attempt to cure their cancer while leaving them feeling like a whole person, not mutilated.



# THERAPEUTIC CONSIDERATIONS SUMMARY

- Whenever possible try to understand the need for post surgical radiation before treatment is underway
- We should optimize treatment of the cancer side over the prophylactic side.
- The patients have a desire to minimize the number of surgeries, but the outcome can potentially be far worse, by delaying necessary therapies to treat the cancer, while the patient recovers from infection or complication on the prophylactic side.
- Consider preexisting factors such as obesity, diabetes, smoking when planning surgical therapy.
- Use of Alloderm or Autoderm can help with cosmesis and create more protection of the expander or implant if the patient needs radiation postoperatively.
- Autoderm can be used to create mastopexy mastectomy and avoid devascularizing the inferior portion of the incision with resulting potential for flap necrosis. Patient can benefit even if no radiation is planned.

The End