What is the justification of the return of radical surgery for advanced breast cancer.

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• Locally advanced breast cancers contribute to about 10-20% of newly diagnosed worldwide.
• Unfortunately in South Africa as in many developing countries 60% of tumours are classified as locally advanced.
• Locally advanced cancers have widely different clinical and biological characteristics.
Locally advanced breast cancers

- Large primary tumours and/or extensive regional lymph node involvement without evidence of distant metastases that don’t respond to primary chemotherapy regimes
• Large primary tumours and or extensive regional lymph node involvement with evidence of distant metastases that do respond to primary chemotherapy
• Bone metastases only
• Visceral metastases
Information required prior to starting the trip

- History and examination
- Radiology
- Pathology
- Metastatic workup
- Photographic initial sizing
- Multi-disciplinary decision making
The road now less travelled:

The argument for NO upfront surgery

- For all types of LABC, irrespective of whether operable or not, the majority of patients developed distant metastases within 24 months of diagnosis.
- High rates of loco-regional failure were documented again irrespective of whether surgery and/or radiation was offered (surgery alone = 60% local recurrence).
- Loco-regional recurrences varied from 25% to 72%.
- Preoperative or postoperative radiation therapy improved loco-regional control rates but did not alter survival rates.
- Local control without systemic therapy results in a less than 20% 10-year survival.
Primary chemotherapy

- gold standard for all patients with locally advanced breast cancer
- facilitates cosmesis
- Form of biological warfare
Primary chemotherapy unpacked

• The biologic rationale of using primary chemotherapy is based on the observation in animal tumour models that there is accelerated metastatic growth after primary tumour resection

• Further reasons for the use of preoperative chemotherapy are based on its potential clinical benefits, such as increasing tumour resectability by reducing the size of the primary tumour, improving local control of disease, and allowing breast-conserving surgery to be undertaken

• More than 70% of patients achieve a good clinical response with 10-25% of them achieving a complete pathological response
The many oncology drugs mentioned are not to impress, bore or confound but merely to emphasis, that not unlike antibiotics developed for bacterial resistance the list is ever increasing.
• Prior to accepting primary chemotherapy defeat, and offering a salvage operation, careful discussion as to the heroic and sometimes foolish outcomes must be born in mind.
Target therapies add to the weaponry

- In recent years the identification of signalling pathways and genetic alterations has lead to the clinical development of a number of successful molecular targeted therapeutic agents. The most well known being Herceptin and similar active agents that have changed the natural history of Her2 amplified breast cancers. There are numerous other targets under investigation, the most exciting is everolimus and the Bollero trials.
The effect of Advanced breast cancer on quality of life

- The physical issues of pain, odour and loss of function must be carefully considered when deciding on treating or withholding treatment in these women.
• Psychological support, both through therapy and medication (anti-depressants, and anxiolytics) play an important role.

• For many patients, failure to respond to primary chemotherapy or the development of metastatic disease is more devastating than the original cancer diagnosis.
• In view of the vast improvements made in oncological care and the effect of advanced breast cancer on patient morale, surgery is a double edged sword
There is most definitely a place for surgery in patients with advanced breast cancer, the question is when
Guidelines

• Leaving macroscopic tumour behind, is not a surgical victory
• Operating in the presence of active, aggressive visceral disease is pointless
OVERCONFIDENCE

This is going to end in disaster, and you have no one to blame but yourself.
Patients who have had a good response to primary chemotherapy who still have large tumour volumes, should be reassessed in the MDM, with particular attention being paid to

- Radiological assessment of extent of axillary nodal disease
- Photo-documentation of extent of tumour discussed with onco-plastic team
- Documentation of metastatic disease at time of finishing primary chemotherapy
- Options of palliative radiation therapy
- Value of second line chemotherapy
- Psychological profile of the patient at the current time.
Imagine your patient with advanced breast cancer is the titanic, and the cancer is the iceberg.
Surgery upfront prior to chemotherapy is like chopping off the top of the iceberg, daft as the ship is still going down (quickly)
• Chemotherapy upfront, followed by surgery (timed when appropriate, see below), although the ship is still going to sink, this may be a more dignified exit approach and akin to the band playing while a few brave souls continue dancing....and who knows some may reach a life boat
Conclusion

• Surgery does play a role in the management of advanced breast cancer. Although it may not be the star of the show (leading lady), surgery is definitely not completely in the wings.