Regimen Monograph

Regimen Name | Drug Regimen | Cycle Frequency | Premedication and Supportive Measures | Administrative Information | References | Disclaimer

A - Regimen Name

AC-NPAC(W)+PERT+TRAS Regimen

ADRIAMYCIN ® (DOXOrubicin)-Cyclophosphamide then nab-PACLitaxel Weekly and Pertuzumab, Trastuzumab

Disease Site

Breast

Intent

Curative
Adjuvant

Regimen Category

Evidence-informed :

Regimen is considered appropriate as part of the standard care of patients; meaningfully improves outcomes (survival, quality of life), tolerability or costs compared to alternatives (recommended by the Disease Site Team and national consensus body e.g. pan-Canadian Oncology Drug Review, pCODR). Recommendation is based on an appropriately conducted phase III clinical trial relevant to the Canadian context OR (where phase III trials are not feasible) an appropriately sized phase II trial. Regimens where one or more drugs are not approved by Health Canada for any indication will be identified under Rationale and Use.

This **Regimen Abstract** is an **abbreviated** version of a Regimen Monograph and contains only top level information on usage, dosing, schedule, cycle length and special notes (if available). Information in regimen abstracts is accurate to the extent of the ST-QBP regimen master listings, and has not undergone the full review process of a regimen monograph. Full regimen monographs will be published for each ST-QBP regimen as they are developed.

Rationale and Uses

For the treatment of early HER2-positive breast cancer who have a high risk of recurrence, in patients who experienced hypersensitivity reactions to taxanes or have significant contraindications to taxanes and/or their pre-medications.

(Refer to the NDFP eligibility form for detailed funding criteria)

Supplementary Public Funding

nab-PACLitaxel
New Drug Funding Program (Nab-Paclitaxel - Hypersensitivity Reactions to Taxanes) (NDFP Website)

trastuzumab
New Drug Funding Program (Trastuzumab (Biosimilar) - Adjuvant Treatment for Breast Cancer) (NDFP Website)

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B - Drug Regimen

Note: Different trastuzumab products are **NOT INTERCHANGEABLE.**

Nab-PACLitaxel is not-interchangeable with other PACLitaxel formulations.

AC: (x 4 cycles)

DOXOrubicin	60 mg /m²	IV	Day 1; q21 Days
cyclophosphamide	600 mg /m²	IV	Day 1; q21 Days

THEN

nab-PACLITAXEL Weekly: (x 12 doses)

nab-PACLitaxel*	125 mg /m²	IV	Day 1; q7 days

*May be given as nab-Paclitaxel 125 mg/m^2 Days 1, 8, 15; q28 days for 4 cycles (Gianni 2018)

Pertuzumab and Trastuzumab to be given every 21 days for one year, starting concurrently with paclitaxel:

PERTuzumab	840 mg	IV loading dose	Day 1

(This drug is not currently publicly funded for this regimen and intent)

trastuzumab	8 mg /kg	IV loading dose	Day 1

THEN,

PERTuzumab	420 mg	IV maintenance dose	q21 days

(This drug is not currently publicly funded for this regimen and intent)

trastuzumab	6 mg /kg	IV maintenance dose	q21 days

Alternative chemotherapy schedule:

AC: (x 4 cycles)

DOXOrubicin	60 mg /m²	IV	Day 1; q14 days
cyclophosphamide	600 mg /m²	IV	Day 1; q14 days

THEN

nab-PACLITAXEL Weekly: (x 12 doses)

nab-PACLitaxel*	125 mg /m²	IV	Day 1; q7 days

*May be given as nab-Paclitaxel 125 mg/m^2 Days 1, 8, 15; q28 days for 4 cycles (Gianni 2018)

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C - Cycle Frequency

AC X 4 cycles then weekly nab-Paclitaxel X 12 doses.

Pertuzumab and trastuzumab to start concurrently with paclitaxel and continue q21 days. Refer to PERT+TRAS for cycles after the chemotherapy is completed.

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D - Premedication and Supportive Measures

Antiemetic Regimen: High (AC)
Low (nab-Paclitaxel)

- Also refer to CCO Antiemetic Summary

Febrile Neutropenia Risk: Low

AC(Q3W)-NPAC(W)

High
AC(Q2W)-NPAC(W): Use G-CSF prophylaxis for patients at high risk of febrile neutropenia. See G-CSF recommendations.

Screen for hepatitis B virus in all cancer patients starting systemic treatment. Refer to the hepatitis B virus screening and management guideline.

Pre-medications (prophylaxis for infusion reaction):

Nab-paclitaxel:

- No pre-medication to prevent hypersensitivity is required.

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J - Administrative Information

Pharmacy Workload (average time per visit)	43.333 minutes
Nursing Workload (average time per visit)	49.166 minutes

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K - References

Ontario Health drug monographs:

Cyclophosphamide drug monograph, Ontario Health (Cancer Care Ontario).

Doxorubicin drug monograph, Ontario Health (Cancer Care Ontario).

Nab-paclitaxel drug monograph, Ontario Health (Cancer Care Ontario).

Pertuzumab drug monograph, Ontario Health (Cancer Care Ontario).

Trastuzumab drug monograph, Ontario Health (Cancer Care Ontario).

AC-PACL+PERT+TRAS:

Henderson IC, Berry D, Demetri G, Cirrincione C, et al. Improved outcomes from adding sequential paclitaxel but not from escalating doxorubicin dose in an adjuvant chemotherapy regimen for patients with node-positive primary breast cancer. J Clin Oncol 2003; 21(6): 976-83.

Romond EH, Perex EA, Bryant J, et al. Trastuzumab plus adjuvant chemotherapy for operable HER2-positive breast cancer. NEJM 2005; 353(16) 1673-84.

Sparano JA, Wang M, Martino S, et al. Weekly paclitaxel in the adjuvant treatment of breast cancer. NEJM 2008; 358(16): 1663-71.

von Minckwitz G, Proctor M, de Azambuja E, et al. Adjuvant pertuzumab and trastuzumab in early HER2-positive breast cancer. N Engl J Med. 2017;377(2):122-131.

Nab-Paclitaxel:

CADTH Reimbursement Recommendation: Nab-Paclitaxel (for patients who developed hypersensitivity reactions to taxanes). July 2024.

Gianni L, Mansutti M, Anton A, et al.. Comparing Neoadjuvant Nab-paclitaxel vs Paclitaxel Both Followed by Anthracycline Regimens in Women With ERBB2/HER2-Negative Breast Cancer-The Evaluating Treatment With Neoadjuvant Abraxane (ETNA) Trial: A Randomized Phase 3 Clinical Trial. JAMA Oncol. 2018 Mar 1;4(3):302-308.

Untch M, Jackisch C, Schneeweiss A, et al. Nab-paclitaxel versus solvent-based paclitaxel in neoadjuvant chemotherapy for early breast cancer (GeparSepto-GBG 69): a randomised, phase 3 trial. Lancet Oncol. 2016 Mar;17(3):345-356. Erratum in: Lancet Oncol. 2016 Jul;17(7):e270.

PEBC Advice Documents or Guidelines

- Optimal Systemic Therapy for Early Female Breast Cancer

January 2026 new ST-QBP regimen

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M - Disclaimer

Regimen Abstracts

A Regimen Abstract is an abbreviated version of a Regimen Monograph and contains only top level information on usage, dosing, schedule, cycle length and special notes (if available). It is intended for healthcare providers and is to be used for informational purposes only. It is not intended to constitute or be a substitute for medical advice, and all uses of the Regimen Abstract are subject to clinical judgment. Such information is provided on an "as-is" basis, without any representation, warranty, or condition, whether express, or implied, statutory or otherwise, as to the information's quality, accuracy, currency, completeness, or reliability, and Cancer Care Ontario disclaims all liability for the use of this information, and for any claims, actions, demands or suits that arise from such use.

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Regimen Monographs

Refer to the New Drug Funding Program or Ontario Public Drug Programs websites for the most up-to-date public funding information.

The information set out in the drug monographs, regimen monographs, appendices and symptom management information (for health professionals) contained in the Drug Formulary (the "Formulary") is intended for healthcare providers and is to be used for informational purposes only. The information is not intended to cover all possible uses, directions, precautions, drug interactions or adverse effects of a particular drug, nor should it be construed to indicate that use of a particular drug is safe, appropriate or effective for a given condition. The information in the Formulary is not intended to constitute or be a substitute for medical advice and should not be relied upon in any such regard. All uses of the Formulary are subject to clinical judgment and actual prescribing patterns may not follow the information provided in the Formulary.

The format and content of the drug monographs, regimen monographs, appendices and symptom management information contained in the Formulary will change as they are reviewed and revised on a periodic basis. The date of last revision will be visible on each page of the monograph and regimen. Since standards of usage are constantly evolving, it is advised that the Formulary not be used as the sole source of information. It is strongly recommended that original references or product monograph be consulted prior to using a chemotherapy regimen for the first time.

Some Formulary documents, such as the medication information sheets, regimen information sheets and symptom management information (for patients), are intended for patients. Patients should always consult with their healthcare provider if they have questions regarding any information set out in the Formulary documents.

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