International Society of Nurses Cancer Care

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ISNCC POSITION STATEMENT

Document Title: ISNCC Systemic Anti-Cancer Therapies Administration Position Statement
Date Drafted: January 2019
Date Approved by Board of Directors:

Purpose

To advocate for the safe handling and administration of systemic anti-cancer therapies by nurses in all health care settings, by identifying the regulatory, organizational and individual requirements necessary for safety of nurses, other health care personnel, patients and caregivers, including the need for:

- Organizational policies, practice standards and procedures which ensure safety for nurses and their patients.
- Regulatory arrangements which support the nurse's role and responsibilities in relation to administration of systemic anti-cancer treatment.
- Specific evidence-based education for nurses which contribute to attainment of competency in the administration of systemic anti-cancer treatment.

Background

Systemic anti-cancer therapies include cytotoxic chemotherapy, immunotherapies, targeted therapies, and a growing number of novel agents. Systemic anti-cancer therapies are used to destroy cancer cells. These agents are highly toxic compounds that disable or impair normal and cancer cells ability to divide and replicate. Different agents have different mechanisms of action. Depending on the mechanism of action of the treatment, and the impact of the treatment on other body systems and organs, patients receiving these therapies experience a range of acute and chronic side effects (1, 2).

Scientific advances have resulted in significant changes to the nature of systemic anti-cancer therapies. These advances have seen the increasing use of neo-adjuvant and adjuvant treatments in cancer and palliative care and mean that a growing number of people with cancer are offered systemic anti-cancer therapies as a treatment modality. There is also an increased use of oral systemic anti-cancer treatments in the community, requiring a range of strategies and resources to support patient adherence (3).

Systemic anti-cancer therapies have the potential to harm nurses administering them. Occupational exposure to these agents can occur through absorption of drugs via direct skin contact, inhalation of aerosols and drug particles, ingestion, or injection through accidental needle stick injury. There is also the potential of exposure to other care providers such as assistive workers and to family caregivers. Occupational exposure to some systemic anti-cancer therapies can have mutagenic, teratogenic and/or carcinogenic consequences (4, 6-8). It is recommended that exposure to these therapies be kept to a minimum at all times, with special provisions required for individuals in their first trimester of pregnancy (9).

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International authorities recommend that preparation of systemic anti-cancer therapy is the responsibility of the pharmacist. Inadequate education about systemic anti-cancer therapies and lack of access to protective equipment and trained pharmacists can pose a significant risk to nurses (10).

Best-practice guidelines from leading international authorities recommend safety procedures be implemented to avoid exposure and minimize potential hazards from systemic anti-cancer therapies (6, 7, 9, 10). Safe handling precautions require that health professionals have knowledge of basic pharmacology and drug interactions, the use of safety equipment and safe work practices, and the use of personal protective equipment to reduce occupational chemotherapy exposure (10, 11, 13, 15).

Position

Nurses play a critical role in the administration and care of patients receiving systemic anti-cancer therapies. This role requires advanced knowledge and skills to ensure safe, quality care for patients. It is ISNCC's position that regulatory authorities and organizations involved in delivering anti-cancer therapies should:

- Have policies, protocols, guidelines and procedures in place for the safe prescribing, administration, handling and waste management of systemic anti-cancer therapies.
- Ensure that nurses have access to evidence-based resources, a safe work environment and equipment that ensures safe administration and reduces the risk of occupational exposure to systemic anti-cancer therapies.
- Ensure an appropriate level of education for nurses so that they have the required skills and competencies to ensure safety for nurses, other health care workers, and patients receiving such therapies and their family caregivers.
- Provide adequate information to nurses about potential hazards of occupational exposure to systemic anti-cancer therapies, including current evidence and associated policies about reducing risks for nurses who are pregnant, breast-feeding or trying to conceive.
- Establish documented safety regulation for delivered anti-cancer therapies in all settings.
- Provide access to an oncology pharmacist to prepare systemic anti-cancer therapies wherever possible and, where access to an oncology pharmacist is not possible, ensure nurses have all of the required safety equipment that meet international best practice guidelines (12).

ISNCC recommends that all settings providing systemic anti-cancer therapies should have:

- A comprehensive evidence-based systemic anti-cancer therapy education program for nurses that encompasses all aspects of safe delivery of systemic anti-cancer therapies.
- A verification process for ensuring nurses involved in delivering systemic anti-cancer therapies continue to meet the required standards of practice (4, 7, 10).
- Protocols and associated resources for:
    - hypersensitivity and extravasation managements,
    - safe administration including personal protective equipment for spill and waste management,
    - safe administration of agents via all routes, including oral therapies, and
    - patient/family education for safe administration of systemic anti-cancer therapies.

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- Personal protective equipment that meets appropriate standards for safe administration of systemic anti-cancer therapy.

- An accurate record keeping system, where documentation of patient and staff exposure to systemic anti-cancer therapy is maintained.

- A risk management system to monitor adverse events, incidents and near misses with regular audits to identify error prone areas, and to implement risk reduction strategies to prevent further incidents from occurring and improve standards of care.

- A formal policy stating that nurses only prepare systemic anti-cancer therapies if a pharmacist is not available. If nurses are required to prepare systemic anti-cancer therapies, the nurse must have:

    - personal protective equipment and a biosafety cabinet,
    - reconstitution training and education in safety management with systemic anti-cancer therapies, and
    - access to a recognized oncological pharmacy unit and to medical professionals for advice, support and education.

Acknowledgements

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Resources

1. Cancer Learning www.cancerlearning.gov.au
2. Chemotherapy Consent Templates: http://www.cancerresearchuk.org/health-professional/information-for-your-patients/consent-forms-for-sact-systemic-anti-cancer-therapy#sact_conset0
3. eviQ Cancer Treatments Online www.eviq.org.au
4. MASCC Oral Agent Teaching Tool (MOATT) http://www.mascc.org/MOATT
5. VUCCnet http://cancer.iaea.org/vuccnet.asp
6. http://www.isncc.org/page/OralChemo; https://voice.ons.org/news-and-views/adherence-to-oral-agents-for-cancer)
7. https://www.oncolink.org/cancer-treatment/chemotherapy/chemotherapy-safety
8. http://www.paho.org/hq/index.php?option=com_content&view=article&id=13056&Itemid=42283&lan

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