

GUIDELINES FOR THE PREVENTION OF CHEMOTHERAPY REGIMEN SPECIFIC COMPLICATIONS – SERIOUS HYPERSENSITIVITY REACTIONS

INTRODUCTION

The drugs in the following table are known to cause allergic reactions. The list is not exhaustive. Refer to individual SACT (systemic anticancer therapy) protocols and Summary of Product Characteristics for further details.

Note: any individual may react to any drug or excipient.

DRUGS KNOWN TO CAUSE HYPERSENSITIVITY REACTIONS

Drug	Common Reactions	Routine Pre-Medication Required	Notes
Antithymocyte globulins	Fever Skin reactions Serum sickness	Paracetamol Chlorphenamine Methylprednisolone	Rabbit derived: Thymoglobuline® Horse derived: Atgam®
Asparaginase	Rash Anaphylaxis	None	<i>Escherichia coli</i> derived: Pegaspargase® Spectrila® <i>Erwinia chrysanthemi</i> derived: Erwinase®
Azacididine	Anaphylaxis	None	
Bevacizumab	Infusion related reactions Anaphylaxis	None	Humanised monoclonal antibody produced in Chinese Hamster ovary cells
Bleomycin	Fever Respiratory complications	None	
Blinatumomab	Fever Infusion related reactions Cytokine release syndrome	Paracetamol Dexamethasone	Bispecific T-cell receptor-engaging (BiTE) antibody
Brentuximab vedotin	Infusion related reactions	Paracetamol Dexamethasone Chlorphenamine	Antibody-drug conjugate Monoclonal antibody produced by recombinant DNA technology in Chinese Hamster ovary cells
Carboplatin, Cisplatin & Oxaliplatin	Late onset rash Re-challenge may lead to bronchospasm or anaphylaxis	None	Cross reactions reported with platinum compounds
Carmustine	Flushing of the skin and conjunctiva	None	Reactions due to alcohol content of product
Cytarabine	Fever Rash	None	
Daratumumab	Infusion related reactions Anaphylaxis	Methylprednisolone Paracetamol Chlorphenamine	Montelukast premedication at clinician discretion Human monoclonal antibody
Dinutuximab beta	Infusion related reactions Cytokine release syndrome Anaphylaxis	Paracetamol Chlorphenamine	Mouse-human chimeric monoclonal antibody produced in Chinese Hamster ovary cells

Drug	Common Reactions	Routine Pre-Medication Required	Notes
Docetaxel	Hypotension Bronchospasm Rash Fluid retention	Dexamethasone	
Etoposide	Rash Anaphylaxis Bronchospasm	None	
Gemtuzumab ozogamicin	Infusion related reactions Anaphylaxis	Paracetamol Chlorphenamine	Antibody-drug conjugate Recombinant humanised monoclonal antibody
Inotuzumab ozogamicin	Hypotension Flushes Breathing problems	Paracetamol Hydrocortisone Chlorphenamine	Antibody-drug conjugate Recombinant humanised monoclonal antibody
Ipilimumab	Inflammatory adverse reactions e.g. colitis, pneumonitis, skin reactions, hepatotoxicity, neurological reactions, endocrinopathies Infusion related reactions	None	Human monoclonal antibody produced in Chinese Hamster ovary cells
Mifamurtide	Fever Chills	Paracetamol (routine use of corticosteroids should be avoided)	Synthetic analogue of muramyl dipeptide, an immune stimulatory component of <i>Mycobacterium sp.</i> cell walls
Nivolumab	Immune-related adverse effects e.g. pneumonitis, colitis, hepatitis, nephritis, endocrinopathies, skin reactions Infusion related reactions	None	Human monoclonal antibody produced in Chinese Hamster ovary cells
Paclitaxel	Anaphylaxis	Chlorphenamine Dexamethasone	
Pembrolizumab	Infusion related reactions Anaphylaxis	None	Humanised monoclonal antibody produced in Chinese Hamster ovary cells
Procarbazine	Skin reactions	None	Procarbazine is a weak monoamine oxidase inhibitor – mild monoamine oxidase reactions reported with tyramine containing foods
Rituximab	Fever Chills Cytokine release syndrome	Paracetamol Chlorphenamine	Mouse-human chimeric monoclonal antibody produced in Chinese Hamster ovary cells
Selpercatinib	Fever Rash Arthralgia Myalgia	None	Hypersensitivity more commonly reported in patients pre-treated with anti PD-1/PD-L1 immunotherapy

PRE-MEDICATION

To prevent serious hypersensitivity reactions pre-medication must be prescribed, if indicated. Refer to specific guidance in relevant clinical guideline or SACT protocol.

ANAPHYLAXIS

Refer to C23-Resuscitation Policy (Anaphylaxis Algorithm).

REFERENCES

See summary of product characteristics for each medicine. Available at www.medicines.org.uk

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1.1	Apr 24	Liz Evans	Archived	3-month extension to expiry to allow review and approval via MMOC
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Review and Revision(s) Log <i>Record of revision(s) made to guidelines since Version 1</i>			
Section Number	Page Number	Revision(s) made	Reason for revision(s)
Drugs known to cause hypersensitivity reactions	1 and 2	Spectrila®, azacitidine, bevacizumab, oxaliplatin, daratumumab, gemtuzumab ozogamicin, ipilimumab, nivolumab, paclitaxel, pembrolizumab and selpercatinib	Medicines approved since Version 1 added