

Supplementary table A: Overview of the first generation H₁-antihistamines available in Belgium, France, Germany, the Netherlands and the United Kingdom, in oral single drug formulation, with ATC-code R06. The table shows labeled indications, ages and accessibility on the market.

COUNTRY	FORMULATION	INDICATION	LICENSING AGE	OTC/POM
Alimemazine tartrate (Trimeprazine tartrate)				
Belgium	Tablet	Symptomatic treatment of various allergic manifestations: rhinitis, conjunctivitis, urticaria. Adjuvant symptomatic treatment of itching skin conditions (eczema, prurigo ...).	>12y	POM
France	Drops	Occasional insomnia. Transient insomnia. Symptomatic treatment of various allergic manifestations: rhinitis (seasonal or perennial), conjunctivitis, urticaria. Symptomatic treatment of uncomfortable dry cough, more specifically at night. Premedication before general anaesthesia.	>1y (antihistamine, and as premedication) >2y (antitussive) >3y (sleep medication)	POM
	Syrup	Occasional insomnia. Transient insomnia. Symptomatic treatment of various allergic manifestations: rhinitis (seasonal or perennial), conjunctivitis, urticaria. Symptomatic treatment of uncomfortable dry cough, more specifically at night.	>1y (antihistamine) >2y (antitussive) >3y (sleep medication)	OTC
	Tablet	Occasional insomnia. Transient insomnia. Symptomatic treatment of various allergic manifestations: rhinitis (seasonal or perennial), conjunctivitis, urticaria. Symptomatic treatment of uncomfortable dry cough, more specifically at night.	>6y	POM
Germany	NA			
The Netherlands	Tablet	Allergic conditions due to release of histamine such as hay fever, perennial allergic rhinitis, urticaria and other dermatoses based on allergic (direct type), drug exanthemas, allergic dermatoses and as adjuvant for bronchial asthma of allergic origin.	>2y	POM
The United Kingdom	Oral solution, tablet	Management of urticaria and pruritus.	>2y	POM
	Oral solution, tablet	Premedication as a sedative before anaesthesia	2-7y	POM

Chlorphenamine maleate				
Belgium	Tablet	Symptomatic treatment of various allergic manifestations: hay fever and pollinosis, allergic rhinitis and conjunctivitis, acute urticaria. Adjuvant for drug allergy, serum sickness, angioedema, pruritus, insect bites, contact dermatitis, atopic dermatitis.	>6y	OTC
France	NA			
Germany	NA			
The Netherlands	NA			
The United Kingdom	Syrup	For the symptomatic relief of hay fever, vasomotor rhinitis, urticaria, angioneurotic oedema, reactions to food or medicines, serum reactions, and insect bites. Symptomatic relief of itch associated with chickenpox.	>1y	OTC
	Tablet	For the symptomatic relief of hay fever, vasomotor rhinitis, urticaria, angioneurotic oedema, reactions to food or medicines, serum reactions, and insect bites. Symptomatic relief of itch associated with chickenpox.	>6y	OTC
Clemastine hydrogen fumarate				
Belgium	NA			
France	NA			
Germany	NA			
The Netherlands	Tablet	Prevention and symptomatic treatment of allergic conditions based on release of histamine, such as hay fever, perennial allergic rhinitis, urticaria and other dermatoses due to allergy (direct type) such as prurigo and insect bites; drug exanthemas and as an adjuvant for other forms of eczema. Prevention of adverse events during hyposensibilisation treatment, due to allergy. Adjuvant for allergic asthma.	>1y	POM
The United Kingdom	Tablet	Allergic rhinitis, including hay fever and perennial rhinitis, vasomotor rhinitis. Allergic dermatoses, including pruritus, atopic eczema and contact dermatitis. Angioneurotic oedema, drug allergy.	>1y	OTC

Cyclizine hydrochloride				
Belgium	NA			
France	NA			
Germany	NA			
The Netherlands	Tablet	Prevention and treatment of motion sickness. Prevention and treatment of nausea vomiting.	>6y	OTC
The United Kingdom	Tablet	Prevention and treatment of nausea and vomiting including: motion sickness, nausea and vomiting caused by narcotic analgesics and by general anaesthetics in the post-operative period, vomiting associated with radiotherapy Relief of vomiting and attacks of vertigo associated with Meniere's disease and other forms of vestibular disturbance.	>6y	OTC
Cyproheptadine				
Belgium	NA			
France	Tablet	Symptomatic treatment of various allergic manifestations: rhinitis (seasonal or perennial), conjunctivitis, urticaria.	>6y	OTC
Germany				
The Netherlands	Tablet	Treatment of acute and chronic allergies: dermatoses based on allergy such as urticaria, angioneurotic edema, dermatitis, insect bites or insect stings; allergic conditions such as allergic rhinitis (rhinitis vasomotorica), hay fever, serum sickness and allergic drug reactions. Adjunctive therapy to adrenaline and other standard measures for the relief of anaphylactic reactions.	>2y	POM
The United Kingdom	Tablet	Treatment of acute and chronic allergic and pruritic conditions, such as dermatitis, including neurodermatitis and neurodermatitis circumscripta; eczema; eczematoid dermatitis; dermatographism; mild, local allergic reactions to insect bites; hay fever and other seasonal rhinitis; perennial allergic and vasomotor rhinitis; allergic conjunctivitis due to inhalant allergens and foods; urticaria; angioneurotic oedema; drug and serum reactions; anogenital pruritus; pruritus of chicken pox. Adjunctive therapy to adrenaline and other standard measures for the relief of anaphylactic reactions. In migraine and vascular headache.	>2y	OTC

Dexchlorpheniramine maleate				
Belgium	NA			
French	tablet	Symptomatic treatment of allergic manifestations: rhinitis (seasonal or perennial), conjunctivitis, urticarial.	>6y	OTC
Germany	NA			
The Netherlands	Tablet	Symptomatic treatment of allergic conditions: allergic conditions of the respiratory tract such as hay fever, perennial allergic rhinitis; allergic skin conditions: urticarial; other hypersensitivity reactions: drug allergy, food allergy, allergic conjunctivitis.	>6y	POM
The United Kingdom	NA			
Diphenhydramine hydrochloride				
Belgium	Tablet	Symptomatic treatment of allergic manifestations: rhinitis, conjunctivitis, urticaria. Symptomatic relief of pruritus in some dermatologic conditions.	>6y	OTC
	Tablet	Temporarily or occasional aid to promote induction of sleep.	>16y	OTC
France	Tablet	Prevention and treatment of motion sickness.	>2y	OTC
Germany	NA			
The Netherlands	NA			
The United Kingdom	Tablet	Treatment of allergic conditions, e.g. hay fever, vasomotor rhinitis, stings, urticaria, angioneurotic oedema, drug sensitivity, contact dermatitis and photosensitivity.	>12y	OTC
	Tablet, syrup	Relief of temporary sleep disturbance.	>16y	OTC
Dimenhydrinate				
Belgium	Tablet	Prevention and symptomatic treatment of motion sickness. Prevention and treatment of nausea and vomiting not induced by antimototics.	>2y	OTC
France	Capsule	Prevention and treatment of motion sickness. Short term symptomatic treatment of nausea and vomiting (not associated with fever)	>15y	OTC
	Syrup	Prevention and treatment of motion sickness. Short term symptomatic treatment of nausea and vomiting (not associated with fever).	>2y (for motion sickness)	OTC

			>6y (for nausea and vomiting)	
Germany	Syrup	Prevention and symptomatic treatment of nausea and vomiting, especially in motion sickness.	>6kg	OTC
	Dragees	Prevention and symptomatic treatment of nausea and vomiting, especially in motion sickness.	>6y	OTC
	Slow release capsule	Prevention and symptomatic treatment of nausea and vomiting, especially in motion sickness.	>14y	OTC
The Netherlands	NA			
The United Kingdom	Tablet	Anti-emetic in the prevention and treatment of motion sickness; irradiation sickness, postoperative vomiting, drug-induced nausea and vomiting, and the symptomatic treatment of nausea and vertigo due to Meniere's disease and other labyrinthine disturbances.	>2y	ND
Dimetindeenmaleaat				
Belgium	Tablet, drops	Symptomatic treatment of pruritus of various origins: urticaria, food allergy, drug allergy, eczema, chickenpox, insect bites, pruritus senilis. Symptomatic treatment of allergic rhinitis: hay fever, or perennial rhinitis.	>1m	OTC
France	NA			
Germany	NA			
The Netherlands	drops	Symptomatic treatment of allergic conditions due to release of histamine such as hay fever, perennial allergic rhinitis, urticaria and other dermatoses based on allergic (direct type).	>1y	POM
The United Kingdom	NA			
Doxylamine succinate				
Belgium	NA			
France	tablet	Occasional insomnia.	>15y	OTC
Germany	Oral solution	Short term treatment of sleep disturbance.	>1y	OTC
The Netherlands	NA			
The United Kingdom	NA			

Ketotifen fumarate				
Belgium	Oral suspension	Prevention of: Extrinsic bronchial asthma, chronic bronchitis with allergic component, infant wheezing, allergic rhinitis.	>6m	POM
	Capsule, slow release tablet	Prevention of: Extrinsic bronchial asthma, chronic bronchitis with allergic component, infant wheezing, allergic rhinitis.	>3y	POM
France	Capsule, oral solution, tablet	Symptomatic treatment of seasonal allergic rhinoconjunctivitis.	>4y	POM
Germany	Syrup	Adjuvant for prevention of allergic asthmatic symptoms in combination with other anti-inflammatory drugs in patients with allergic condition. Symptomatic treatment of allergic rhinitis and allergic skin conditions if non-sedation oral antihistamines or – for allergic rhinitis – local antihistamines or local glucocorticoids are not indicated.	>6m	POM
	Capsule	Adjuvant for prevention of allergic asthmatic symptoms in combination with other anti-inflammatory drugs in patients with allergic condition. Symptomatic treatment of allergic rhinitis and allergic skin conditions if non-sedation oral antihistamines or – for allergic rhinitis – local antihistamines or local glucocorticoids are not indicated.	>3y	POM
The Netherlands	Syrup, tablet, drops	Prevention of bronchial asthma with allergic cause. Prevention and treatment of allergic rhinitis and allergic dermatoses.	>6m	POM
The United Kingdom	Elixir, tablet	Symptomatic treatment of allergic conditions including rhinitis and conjunctivitis.	>3y	POM
Meclozine hydrochloride				
Belgium	tablet	Prevention and symptomatic treatment of nausea, vomiting and vertigo associated with motion sickness.	>12y	OTC
France	tablet	Symptomatic treatment of vertigo. Prevention and treatment of motion sickness.	>15y	POM
Germany	NA			
The Netherlands	Tablet	Motion sickness.	>3y	OTC
The United Kingdom	Tablet	Prevention and treatment of motion sickness. Prevention of nausea and vomiting of sickness and in particular travel sickness.	>2y	ND

Oxomemazine				
Belgium	NA			
France	Syrup	Symptomatic treatment of uncomfortable dry cough, more specifically at night.	>2y	OTC
Germany				
The Netherlands	Syrup	Cough.	>2y	POM
The United Kingdom	NA			
Pimethixene				
Belgium	NA			
France	Syrup	Symptomatic treatment of uncomfortable dry cough, more specifically at night.	>2y	POM
Germany	NA			
The Netherlands	NA			
The United Kingdom	NA			
Promethazine hydrochloride				
Belgium	NA			
France	Syrup	Symptomatic treatment of various allergic manifestations: rhinitis (seasonal or perennial), conjunctivitis, urticaria.	>1y	OTC
	Tablet	Symptomatic treatment of various allergic manifestations: rhinitis (seasonal or perennial), conjunctivitis, urticaria. Occasional insomnia and transient insomnia.	>15y	OTC
Germany	Tablet	Restlessness and agitation with underlying psychiatric disease. Nausea and vomiting.	>2y	POM

The Netherlands	Tablet, syrup	Prevention and symptomatic treatment of allergic conditions based on release of histamine, such as hay fever, perennial allergic rhinitis, urticaria and other dermatoses due to allergy (direct type) such as prurigo and insect bites; drug exanthemas and as an adjuvant for other forms of eczema and allergic asthma. Motion sickness.	>2y	POM
The United Kingdom	Tablet, elixir	Symptomatic treatment for allergic conditions of the upper respiratory tract and skin including allergic rhinitis, urticaria and anaphylactic reactions to drugs and foreign proteins. As an adjunct in preoperative sedation in surgery and obstetrics As an antiemetic. For short term use: paediatric sedative.	>2y	OTC
	Tablet	As a night-time sleep aid, for the correction of temporary disturbances of sleep pattern where there is difficulty in going to sleep or staying asleep, caused for example by specific dislocation of normal routine.	>16y	OTC
Promethazine teoclate				
Belgium	NA			
France	NA			
Germany	NA			
The Netherlands	NA			
The United Kingdom	Tablet	Prevention and treatment of nausea and vomiting, including motion sickness and postoperative vomiting. Vertigo due to Meniere's syndrome, labyrinthitis and other causes.	>5y	OTC

ATC-code: anatomical therapeutic chemical classification code; NA: not available (in oral single drug formulation); ND: no data; OTC: over the counter; POM: prescription only medication.