

WHY THIS GUIDE WAS CREATED AND HOW TO USE IT

IN 2005, THE AMERICAN CONTACT DERMATITIS SOCIETY DESIGNATED CORTICOSTEROIDS AS ALLERGEN OF THE YEAR. In response, the following classification chart has been constructed with the objective to allow for quick referencing and cross-referencing of the members of the corticosteroid family.

REVIEW OF THE CHART DEMONSTRATES FIVE CORE STRUCTURAL CLASSES: A, B, C, D1 AND D2. Each column represents one structural class organized from low to high potency. Because of the cross-reactivity seen between the substances within each structural class, a specified patch test substance — noted at the bottom of the chart — has been selected to screen for class-specific sensitization.

IN ADDITION, THE CHART CAN BE UTILIZED TO CHECK FOR CROSS-REACTIVITY BETWEEN STRUCTURAL CLASSES. For example, Class A components can cross-react with Class D2, thus warranting caution in prescribing a product in either class in a known sensitized patient. One further utility of this chart is that it will enable you to efficiently switch between steroid classes, while maintaining the same numeric potency classification.

We hope you'll find this guide informative and useful.

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skin
& AGING

TOPICAL CORTICOSTEROIDS

A QUICK GUIDE TO POTENCY, STRUCTURAL CLASS AND CROSS-REACTIVITY

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Structural Class	Class A: Hydrocortisone Type	Class B: Triamcinolone Acetonide Type	Class C: Betamethasone Type	Class D1: Betamethasone Dipropionate Type	Class D2: Methylprednisolone Aceponate Type
CLASS 7: LEAST POTENT	Hydrocortisone Hydrocortisone acetate Methylprednisolone, prednisolone Tixocortol pivalate				
CLASS 6: LOW POTENT		Desonide 0.05% C, F  Fluocinolone acetonide 0.01% C, S Triamcinolone acetonide 0.025% C Triamcinolone diacetate 0.025% C		Alclometasone dipropionate 0.05% C, O Betamethasone valerate 0.1% C	
CLASS 5: LOWER MID-STRENGTH		Desonide 0.05% O Fluocinolone acetonide 0.025% C Triamcinolone acetonide 0.1% C , 0.025% O, L Triamcinolone diacetate 0.1% C		Betamethasone dipropionate 0.05% L Betamethasone valerate C, L Fluticasone propionate 0.05% C	Hydrocortisone buteprate 0.1% C, O, S Hydrocortisone butyrate 0.1% C, O, S Hydrocortisone valerate 0.2% C Prednicarbate 0.1% C
CLASS 4: MID-STRENGTH		Amcinonide 0.1% C Fluocinolone acetonide 0.01%, 0.025% O Halcinonide 0.025% C Triamcinolone acetonide 0.1% O Triamcinolone diacetate 0.1% O	Clocortolone pivalate 0.1% C Desoximetasone 0.05% C	Betamethasone valerate 0.12% F  Clobetasone butyrate 0.05% Mometasone furoate 0.1% C, L	Hydrocortisone valerate 0.2% O
CLASS 3: UPPER MID-STRENGTH		Amcinonide 0.1% L Fluocinonide 0.05% Triamcinolone acetonide 0.1% C, O Triamcinolone diacetate 0.1% C, O		Betamethasone dipropionate 0.05% C Betamethasone valerate 0.1% O Clobetasone butyrate 0.05% Diflorasone diacetate 0.05% C Fluticasone propionate 0.005% O Mometasone furoate 0.1% O	
CLASS 2: HIGH POTENT		Amcinonide 0.1% O, L, C Budesonide 0.025% C Fluocinonide 0.05% C, O, G, S Halcinonide 0.1% C, O, S	Desoximetasone 0.25% C , 0.05% G	Betamethasone dipropionate 0.05% O, C Betamethasone valerate 0.1% Diflorasone diacetate 0.05%	
CLASS 1: SUPERPOTENT				Betamethasone dipropionate 0.05% G, O, L Clobetasol propionate 0.05% C, O, G, S, F  Diflorasone diacetate 0.05% O	
ADDITIONAL INFORMATION	Oral: Cloprednol Fludrocortisone acetate Methylprednisolone, prednisolone	Oral: Budesonide Triamcinolone	Oral: Betamethasone Dexamethasone	Oral/IM: Betamethasone	Oral/IV: Hydrocortisone
STRUCTURE	No substitutions in the D ring, except C21 – short-chain esters	C16,17 – cis-diol or – ketal	C16 – methyl substitution	C16 – methyl substitution C17/C21 – long-chain ester	C16 – no methyl substitution C16 – no halogenation C17 – long-chain ester C21 – possible side chain
CROSS-REACTIONS	Cross-reacts with D2	Budesonide specifically cross-reacts with D2			Cross-reacts with Class A and budesonide
PATCH TEST SUBSTANCE	Tixocortol-21-pivalate	Budesonide Triamcinolone acetonide		Clobetasol-17-propionate	Hydrocortisone-17-butyrate

LEGEND: C=Cream, G=Gel, L=Lotion, O=Ointment, S=Solution, F=Foam

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