

Table 1 Classification method into (1) - (3) categories and actual cases of preparation errors

Error category	Classification method
(1) Similarity of drug efficacy	Both of correct drug and incorrect drug have the common efficacy in insurance adaptation.
(2) Similarity of drug name	Trade names of both drugs according to Romanized Japanese satisfy one or more items in the following four items
	1. Three or more letters from beginning are the same 2. Four or more letters from ending are the same 3. Two letters from beginning or three letters from ending are the same, and the numerical value of drug content is the same, too 4. Besides the above three items, both drug names have the commonality of five or more successive letters. ※ The letters expressed singly as “A”, “I”, “U”, “E”, “O”, “N” and the letters of “SHI”, “CHI”, “TSU” are defined as “two letters” exceptionally.
(3) Similarity of drug appearance	Appearances of both drugs satisfy two or more items in the following three items
	1. Colors of both drugs (tablets/capsules) are similar, and colors of both drug blister-packages are similar, too 2. Shapes of both drug blister-packages are similar, or arrangements of both drugs (tablets/capsules) are similar 3. Sizes of both drug blister-packages are similar (area ratio $\geq (0.9)^2 = 0.81$, volume ratio $\geq (0.9)^3 = 0.73$)

	Single similarity class	Double similarity class	Triple similarity class
(1) Similarity of drug efficacy	error type (a) error cases of (1) alone Voltaren (25mg) ⇒ Loxoprofen (60mg) Amoban (7.5mg) ⇒ Lendormin (0.25mg)	error type (d) error cases of (1) and (2) Alfárol (1µg) ⇒ Onealfá (0.5µg) ● <u>A</u> /RU/FUA/RO/O/RU (1µg) ⇒ WA/N/ <u>A</u> /RU/FUA (0.5µg) Constan (0.4mg) ⇒ Lexotan (1mg) ● KO/N/SU/ <u>T</u> A/N (0.4mg) ⇒ RE/KI/SO/ <u>T</u> A/N (1mg)	error type (g) error cases of (1) and (2) and (3) Bio-Three (1g) ⇒ Biofermin-R (1g) ● <u>B</u> I/O/SU/RI/I (1g) ⇒ <u>B</u> I/O/FUE/RU/MI/N·[R] (1g) Ensure Liquid (250ml) ⇒ Ensure-H (250ml) ● <u>E</u> /N/ <u>S</u> HU/A LI/KI/DDO (250ml) ⇒ <u>E</u> /N/ <u>S</u> HU/A·[H] (250ml)
(2) Similarity of drug name ● Drug name in Romanized Japanese	error type (b) error cases of (2) alone Mucosta (100mg) ⇒ Mucodyne (250mg) ● <u>M</u> U/KO/SU/TA (100mg) ⇒ <u>M</u> U/KO/DA/I/N (250mg) Decadron (0.5mg) ⇒ Depas (0.5mg) ● <u>D</u> E/KA/DO/RO/N (0.5mg) ⇒ <u>D</u> E/PA/SU (0.5mg)	error type (f) error cases of (2) and (3) Calonal (200mg) ⇒ Caltan (500mg) ● <u>K</u> A/RO/NA/A/RU (200mg) ⇒ <u>K</u> A/RU/TA/N (500mg) Caloryl Jelly (40.496%) ⇒ Argamate Jelly (20%) ● <u>K</u> A/RO/RI/I/RU <u>Z</u> E/RI/I (40.496%) ⇒ A/A/GA/ME/I/TO <u>Z</u> E/RI/I (20%)	
(3) Similarity of drug appearance	error type (c) error cases of (3) alone Zyloric (100mg) ⇒ Calonal (200mg) Lasix (40mg) ⇒ Warfarin (1mg)	error type (e) error cases of (3) and (1) Proheparum (combination) ⇒ EPL (250mg) Bonalon (35mg) ⇒ Actonel (17.5mg)	
(1) Similarity of drug efficacy	error type (a) error cases of (1) alone		

The underline represents the common points between correct drug and incorrect drug.