



# **How to Use the NHS England Dose Banding Tables**

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Version number: 1

First published: April 2016

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Classification: OFFICIAL

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# 1 How to Use NHS England Dose Banding Tables

Dose banding is a system whereby drug doses which are calculated are grouped and rounded to set of pre-defined doses. Each series of consecutive dose(s) is called a 'band', with the dose to which they are rounded towards being the 'banded dose'.

These tables, used in conjunction with the CQUIN and the draft DTC submission paper, follow two main rules:

1. No target dose of 'traditional' SACT is greater than  $\pm 6\%$  of the precise calculated dose without specific prior agreement
2. No target dose of MAB's used as a SACT is greater than  $\pm 10\%$  of the precise calculated dose without specific prior agreement

Below outlines the different sections of the tables and also gives a couple of situational examples.

## 1.1 What the Table Labels Mean

**Concentration** of the active ingredient to be used (there maybe more than one concentration per

**\*Depending on the electronic prescribing software one of the two columns will apply**

The **drug(s)** that the table relates to

**National Dose Banding Table – Single Container**

Strength of raw material (after reconstitution if required)	10 mg/mL	Example drug(s)	Carboplatin
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See table usage notes below regarding 'single container' and 'multiple syringe' tables.

**Master Bands and Ranges**

This table is intended to be in a format useful for electronic prescribing systems.  
 Use To (A) if your system will round UP for doses on the step between two bands.  
 Use To (B) if your system will round DOWN for doses on the step between two bands.  
 The dose range is designed to cover drugs which may be added in the future.

Band Range (mg)			Band Dose (mg)	Variance (percent)	
From $\geq$	To (A) <	To (B) $\leq$		Below	Above
7.54	8.49	8.48	8	6	-6
8.49	9.49	9.48	9	6	-5
9.490	10.49	10.48	10	5	-5
10.49	11.49	11.48	11	5	-4
11.49	12.49	12.48	12	4	-4
12.49	13.49	13.48	13	4	-4
13.49	14.49	14.48	14	4	-3
14.49	15.49	15.48	15	4	-3
15.49	16.49	16.48	16	3	-3

The **range** of doses that constitute the band width

The **banded dose** that is to be prescribed

The **lower limit** of the range

These doses are the **upper limits** of the bands and will be different for different Electronic prescribing systems\*

The **variance** is the difference between the upper/lower limits of the band and the banded dose

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When selecting a dose band from a precise calculated dose – choose the range into which that dose fits and then select the corresponding dose band (show in the below example).

1309.75	1441.99	1441.98	1368	4	-5
1441.99	1612.19	1612.18	1520	5	-6
1612.19	1802.49	1802.48	1710	6	-5
1802.49	2010.77	2010.76	1900	5	-6
2010.77	2257.09	2257.08	2128	6	-6

Using the above cross section of the table as an example if the precise dose calculated falls between the range **1802.49mg and 2010.77mg (or 2010.76mg) and the dose band will be 1900mg**.

### 1.2 Using the Second Section of the Tables

The second section of the table is detailed below and can be used as an alternative for those not using electronic prescribing or where dose banding functionality is not available within the system. If the dose per meter squared required is not listed in this type of table revert to using that highlighted above.

BSA	Choose nearest for dose reductions								1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0
50 mg/m <sup>2</sup>	24	26.4	28.8	32.4	36	39.6	44.4	49.2	54	60	66	72	78	84	90	96	108	120	132	144	156	168	180	192	204	216	228	240	252
60 mg/m <sup>2</sup>	28.8	32.4	36	39.6	44.4	49.2	54	60	66	72	78	84	90	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276
80 mg/m <sup>2</sup>	39.6	44.4	49.2	54	60	66	72	78	90	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324
100 mg/m <sup>2</sup>	49.2	54	60	66	72	78	84	90	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336
135 mg/m <sup>2</sup>	72	78	84	90	96	108	120	132	144	156	168	180	198	216	240	270	300	336	378	420	468	516	564	612	660	708	756	804	852
175 mg/m <sup>2</sup>	90	96	108	120	132	144	162	180	198	216	240	270	300	336	378	420	468	516	564	612	660	708	756	804	852	900	948	996	1044
200 mg/m <sup>2</sup>	96	108	120	132	144	162	180	198	216	240	270	300	336	378	420	468	516	564	612	660	708	756	804	852	900	948	996	1044	1092
250 mg/m <sup>2</sup>	120	132	144	162	180	198	216	240	270	300	336	378	420	468	516	564	612	660	708	756	804	852	900	948	996	1044	1092	1140	1188

When dosing the patient using this table it can be done using the calculated body surface area (BSA) rounded to the nearest one decimal point increment (**highlighted in red**) on the chart above.

For each of the corresponding BSA's there is a dose given that correlates to the mg/m<sup>2</sup> dose which appears on the right hand side of the table (**highlighted in green**).

Therefore the correct **dose band** for a patient with a BSA of **1.4m<sup>2</sup>** at a dose of **135mg/m<sup>2</sup>** is **198mg** as **highlighted in blue**.

If a 50% dose reduction is required for this patient (198mg x 0.5 = 99mg) choose the nearest number on the same row – in this case 96mg to ensure the dose reduction is also banded. For a patient with a BSA of **1.9m<sup>2</sup>** at a dose of **80mg/m<sup>2</sup>** then the dose band is **144mg**.

### 1.3 Pick and Mix Tables

For the pick and mix tables the calculation of the doses is exactly the same as above – and the only difference is the presentation of the final product.

The pick and mix tables give the potential presentations of the syringes that can be used in order to make up the final dose required. Therefore the same rules apply as

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above when selecting the **dose band** but the final product is made up of a **combination of syringes**. See below for the worked example:

The dose that is required by the patient has been calculated to be **160mg** therefore using the below table we can see that depending on the maximum syringe size used for the drug (either 50mL or 30mL) the dose can be made up using a combination of either **two or three syringes** in this example.

Total Dose (mg)	"Pick and Mix" syringe sizes (mg) to combine for total doses								
	Using max syringe size 50mL					Using max syringe size 30mL			
	5mg	20mg	50mg	60mg	100mg	5mg	20mg	50mg	60mg
40		2					2		
45	1	2				1	2		
50			1					1	
55	1		1			1		1	
60				1					1
65	1			1		1			1
70		1	1				1	1	
75	1	1	1			1	1	1	
80		1		1			1		1
90		2	1				2	1	
100					1			2	
110			1	1				1	1
120				2					2
130		1	1	1			1	1	1
140		1		2			1		2
150			1		1			3	
<b>160</b>				<b>1</b>	<b>1</b>			<b>2</b>	<b>1</b>
180				3					3
200					2			4	

### 1.4 Drugs with Multiple Strengths

Some drugs are available in multiple strengths, including docetaxel, gemcitabine, fluorouracil, cytarabine and methotrexate. Each strength of a drug will have a different dose banding table. Use the table for the strength of raw material you or your supplier are using. Note that although fluorouracil is available as both 25mg/mL and 50mg/mL strengths, it appears only on the 50mg/mL table as these doses will work for both strengths.

