CHEMOTHERAPY WASTE CALCULATOR

October 2019

Version 2.0

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BACKGROUND

NHS England has developed a tool to allow trusts to share their chemotherapy waste for the purposes of Benchmarking. NHS England has explored numerous definitions of waste, and concluded that the most logical process is to ignore the cause of the waste in the benchmarking exercise. Therefore waste could be due to vial size, product expiry, manufacturing issues, patient cancellation or any other factor. In addition, waste may be due to poor data collection on the SACT dataset.

The tool is intended to take just a few minutes to operate each month. (The first time it is run there will be a piece of work needed to map products which will take a little longer.)

Sharing of waste data will allow those trusts operating with higher levels of waste to explore with their peers if there are opportunities to reduce waste. In addition, understanding which drugs have the highest amounts of waste nationally will enable NHS England to focus work with suppliers to optimise vial sizes or other presentations.

NHS England is aware there is conflicting opinions about the extent to which out-sourcing may increase or reduce waste, and therefore the project will collect, in parallel, information about potential variation in dispensing models.

NHS England is also aware that product shelf life after preparation is a significant constraining factor for shelf life.

For the purposes of this document and the tool, chemotherapy refers to intravenous systemic anti-cancer therapy.

CHOICE OF DRUGS

NHS England is aware that pharmacies are busy, with ever increasing pressure on workload and so has purposefully targeted specific medicines rather than asking for data for every medicine. The list has been developed from the top 10 chemotherapy drugs by expenditure (excluding rituximab to avoid the complexity of multiple commissioners), and the top 10 chemotherapy drugs by activity.

SPREADSHEET VERSIONS

As of October 2019, the current version of the tool is version 2.0. There is now just one version of the tool – one which collects both expenditure and usage data, trusts electing to only submit usage data in Q2 can still use the same tool. Expenditure data is not mandated until Q3 in 2019, however, it can be submitted earlier if the data is available.

DATA LOGIC

It is possible to simply complete the "Summary of Waste" sheet directly with the number of milligrams dispensed on the pharmacy system for each of the 20 targeted medicines (See Appendix 1: 20 Targeted medicines) , and the

number of milligrams recorded as administered in the electronic prescribing system / SACT report.

However, to minimise the effort for individual trusts, NHS England has developed the tool to allow importing of data from the pharmacy system and the SACT report to generate the data 'on the fly'.

DATA FLOW

The basic flow of data is shown in the figure below. Two input files are used, these are mapped by the Trust and a summary of waste is produced.

While the input files may contain patient identifiable data (the files are likely to already exist within trusts for other purposes) no identifiable data is produced in the output of the tool to NHS England.
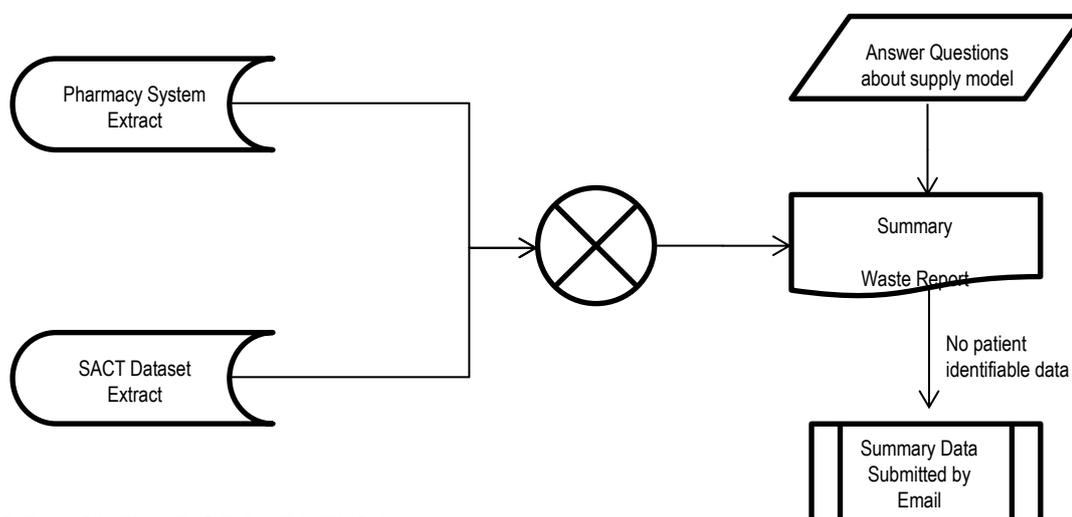

FIGURE 1: OUTLINE OF DATA FLOW

Once the data has been submitted to NHS England, the data will be collated and trusts will receive benchmarking data back.

INPUT DATA STRUCTURE & REQUIREMENTS

PHARMACY FILE

The file must be in Text File format with comma's as delimiters and "" around text (some testing suggests "" are not always required) – this is a typical CSV file. The first row must contain field names. The number of fields in the file is not important, however, there must be no rows with the same field name or with no field name.

The table below describes these fields for the most commonly used pharmacy systems in the country, however similar fields are likely to exist in every pharmacy system.

The file must include the fields listed below:

TABLE 1: REQUIRED MINIMUM DATA IN THE EMIS PHARMACY FILE

Field	EMIS Pharmacy	JAC Pharmacy	Description
Product Code	NSV Code	lnkDID Number	This is a unique code that applies to the individual medicine at VMP level or AMP level but does not need to be a dm+d code.
Product Description	Label or Stores Description	Formulation	The description Needs to include the drug name and size / strength
Quantity	Qty	Quantity	The number of packs / vials issued
Date	Date_Time	Date	The date the transaction took place on the pharmacy system. This should usually be in one of the following formats: dd/mm/yy, dd/mm/yyyy, dd-mm-yyyy yyyy-mm-dd If a time is present it should be in the format HH:MM[:ss] Other date formats may also work depending on local PC settings
Cost (Only required if submitting expenditure data)	Cost	Cost	The issue value in **pounds and pence (£)** for the medicine. (Note: some pharmacy systems may default to reporting this as pence.

As many additional fields as is desired can be provided in the file and are ignored.

The report could be on a per patient basis or on a total per product code basis for each month, the month will need to be listed in a suitable format in the file.

The report should **exclude** internal stock transactions (e.g. from Store to Aseptics) and external issues that would not be reported via SACT (e.g. Sales to another Pharmacy). However where a "manufacturing module" is part of the system transactions which 'create' a final product should normally be included as these would otherwise mask waste.

The report only needs to contain the 20 drugs of interest, but can include other drugs. It is likely that in most cases a file being used to prepare the NHS England and Cancer Drugs Fund Minimum Data Set may hold the information required.

Where drugs are used as part of a clinical trial and the NHS is paying for the medicine rather than the Trial Sponsor, these transactions should be included in the

report. Where drugs are provided free of charge (e.g. Commercially Sponsored Trials, EAMS Schemes and Free of Charge supplies from companies) these can be included in the report and excluded in the tool, or excluded from the report.

Example extracts are shown in Appendix 2: Example JAC EXTRACT and Appendix 3: Example EMIS / ASCRIBE EXTRACT.

A single file containing up to 3 months of data can be used, or three individual files can be used provided the structure of the file is identical (same columns, in same order).

SYSTEM SPECIFIC NOTES

EMIS PHARMACY SYSTEM

Users of Ascribe / EMIS Pharmacy System who use the "Manufacturing Module" should ensure their report includes all transactions to the cost centre MANU and BOND. These are used to handle starting components and may be excluded from some standard reports.

SACT FILE

This should be the SACT 'csv' file exactly as uploaded to the chemotherapy dataset portal, and should cover the same time period as the pharmacy report.

A single file containing up to three months of data can be used or up to six separate files can used. If more than SACT files are uploaded to the portal for the period these should be merged prior to use in the tool.

From version 2 onwards SACT version 2 and SACT version 3 files can both be used at the same time – they are merged within the tool.

COMMA SEPERATED VALUE (CSV) FILES

If you have been supplied the data in a different format (e.g. an Excel Spreadsheet) you can usually save this by opening the data in excel, and with the relevant spreadsheet tab open, clicking: **File/Save As**
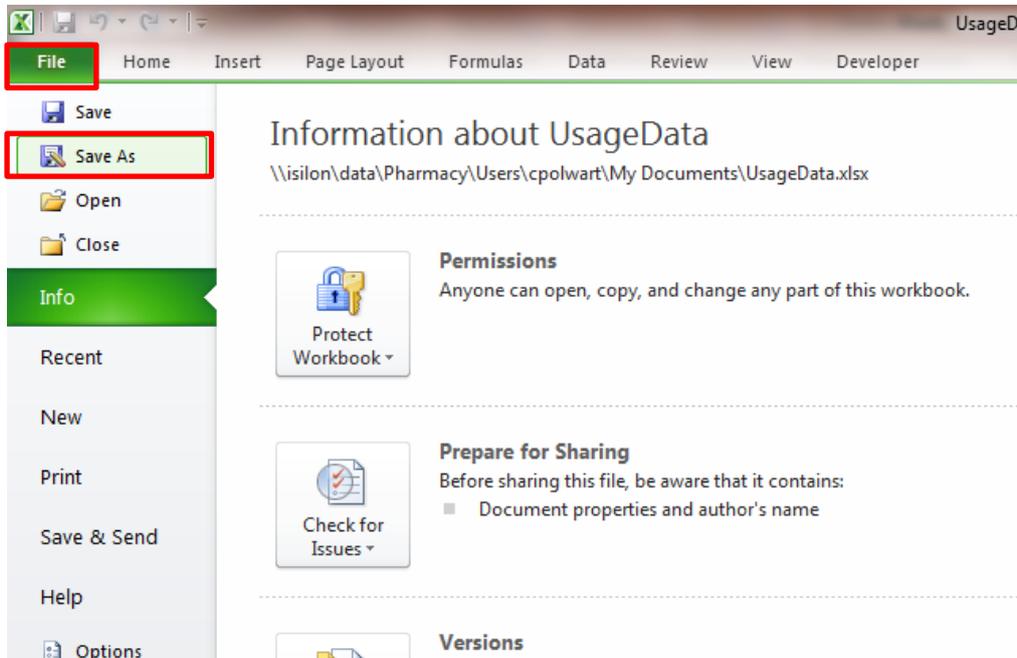
Then change the **"Save as type"** to **CSV (Comma delimited) (*.csv)**, enter a file name and click save. You should now be able to import this file into the tool.
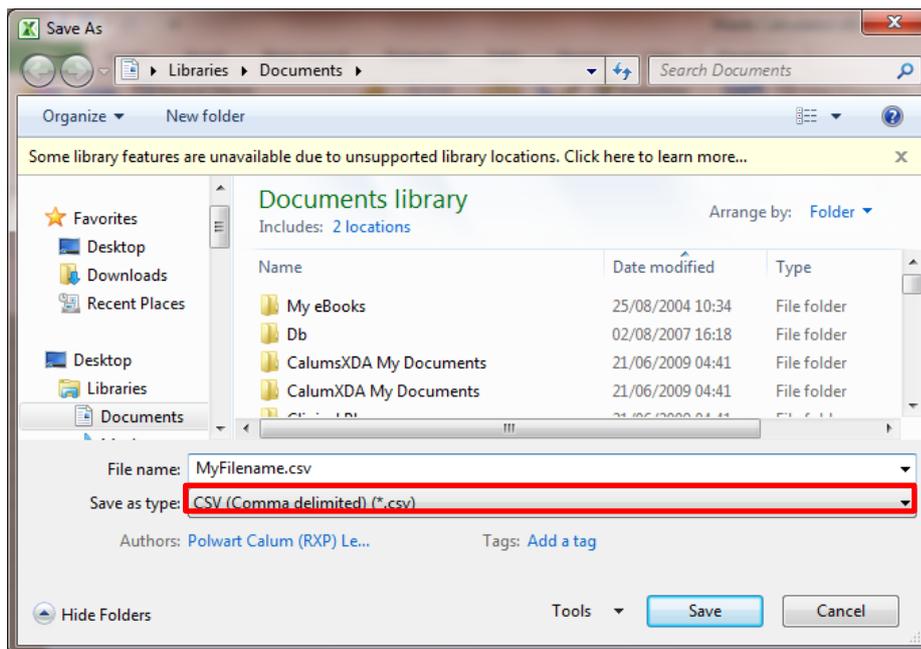
OPERATING INSTRUCTIONS

To operate the tool, the file "**Waste Calculator v2.0b.xlsm**" must be opened in Microsoft Excel 2010 or later. **Excel must have macro's enabled**.

PRIOR TO RUNNING THE SCRIPT

The user must select two file locations. These can be entered by selecting the appropriate field on the spreadsheet and selecting the relevant file in the relevant pop-up box. The two files are:

- Pharmacy File (see PHARMACY FILE on page 3)
- SACT File (see SACT FILE on page 5)

WELCOME SCREEN

When you open the tool for the first time you should be greeted by the Welcome Screen shown below. If your screen has a yellow message at the top asking you to enable macro's you must do this first. Then click "**Start Using Tool"**

Note: If you have previously used the tool and wish to import previous information from a previous version of the file – you can select the previous file on this screen (See Page Importing Data from previous versions of the Tool.
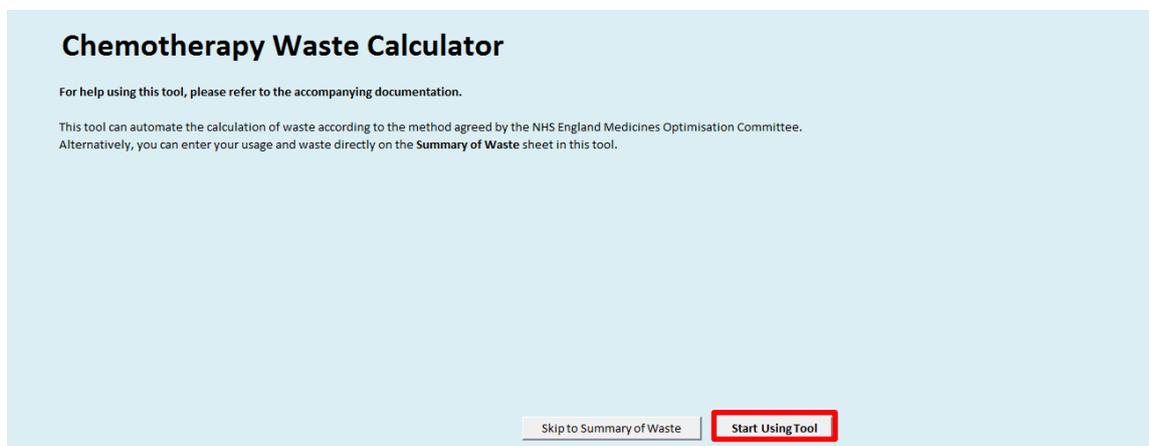
STEP 1: IMPORTING THE PHARMACY & SACT FILE

Select the Pharmacy and SACT File Locations by clicking on the browse buttons on the screen and navigating to the appropriate files. If all the data is in a single file – leave the remaining files blank.

If you do not wish to import any pharmacy data (because you will enter the data manually) leave this blank and select only the SACT data.

Specify the SACT file version type (version2 or 3) for each file.

When all the file names have been selected click "**Import Data"**

STEP 2: SUMMARY OF IMPORTED DATA

After a few moments you should see a brief summary of the data that has been imported in to the tool. This will show you the number of lines of data imported in from the pharmacy data and the number of lines imported in from the SACT data. These will normally be different values.

When you are satisfied your data has been imported click **"Map My Data"**

If there are no SACT v2 or SACT v3 files imported these will show as -1

STEP 3: MAPPING DATA

The first time you map data there will be a number of products and SACT drug names to map. Each time after this, only new product lines will need mapped.

You will need to tell the tool which columns of data in your pharmacy file contain which pieces of information. Click on the white boxes and select the column heading

from your pharmacy file to match the corresponding information. (See PHARMACY FILE - Page 3). If your file structure remains constant you will only do this once.

The tool will automatically list the start date of the report as the first month a with data in the pharmacy file. If you wish to change this you can manually set a date in dd/mm/yyyy format.

Once you have provided the information for the three column names, click "**Map Pharmacy Data**". If you are not importing a Pharmacy File choose "Skip to Map SACT Data".

If you are reporting expenditure data too, this field will also be shown on the tool.

If you are not reporting expenditure data, set the expenditure field to the same field you have chosen for Product Code Column.

STEP 4: MAPPING PHARMACY DATA

Depending on the size of your pharmacy file this can take a couple of minutes.

When complete, you should be taken to a spreadsheet tab called "ProductMaps". This lists each drug that the calculator is interested in. **In the column marked "mg in product" you will need to complete the number of milligrams in the product**. You should only need to do this once.

The first time you see this screen, none of the milligrams in the product will be populated. You will need to manually enter these based on the drug descriptions. Some important points to note:

- It is possible the tool may select products that we are not interested in – e.g. when the tool searches for trastuzumab it may also find trastuzumab emtansine. If this is the case simply indicate it contains 0mg of trastuzumab in the "mg in product" column.
- If your pharmacy data includes clinical trial material that is provided free of charge by the trial sponsor set these as 0mg. (Trial waste is outside the scope of the benchmarking exercise)
- If your pharmacy data includes free of charge supplies or EAMS schemes set the number of mg for these as 0mg.

- If you have "pre-filled" syringes and bags in your data – please map these – usage from these will be important in your final figures
- If you have licenced bags (e,g, Gemcitabine) please include these or your usage data will be distorted.
- If the drug contains 2grams in the product description, be sure to list this as 2000mg in the "mg in product" column rather than 2mg.
- Check your use of Pegylated Liposomal Doxorubicin has populated the mapping table correctly

As an example – on the screen shot on the next page – "BORTEZOMIB 3.5mg Injection" is shown needing the number of milligrams mapping. In the yellow cell you would enter "**3.5**" without entering any units.

In the three columns to the right of the column headed "mg in product" once you have entered a value in the "mg in product" column you will be shown the number of milligrams of that product used in each of the three months being reported. (Depending on the size of your data these figures may take a few moments to update. You can carry on mapping without waiting for the figures to be updated.

**Description in Grams, number of mg entered in mg**

Yellow boxes need completed

Drug	Product Code	Product Description	mg in product	use in mg
AZACITIDINE	D70515	AZACITIDINE 100 mg Powder for Injection	100	7400
BORTEZOMIB	D44754	BORTEZOMIB 3.5 mg Injection		0
CABAZITAXEL	D75532	CABAZITAXEL 60 mg Solution for Infusion	60	120
CYTARABINE	D36835	CYTARABINE 2 g in 20mL Injection	2000	108000
CYTARABINE	D11464	CYTARABINE 1 g in 10mL Injection	1000	14000
CYTARABINE	D77168	CYTARABINE 20 mg in 0.2mL Pre-filled Syringe	20	2000
CYTARABINE	D11470	CYTARABINE 100 mg in 5mL Injection	100	0
DOCETAXEL	D73890	DOCETAXEL 160 mg in 8mL Solution for Infusion	160	17440
DOCETAXEL	D69594	DOCETAXEL 20 mg in 1mL Solution for Infusion	20	1360
DOCETAXEL	T69595	DOCETAXEL 80 mg in 4mL Solution for Infusion (TRIAL)	0	0
DOCETAXEL	D69595	DOCETAXEL 80 mg in 4mL Solution for Infusion	80	2400
PEMBROLIZUMAB	D79411	PEMBROLIZUMAB 50 mg Injection	50	8700
PEMBROLIZUMAB	D79411	PEMBROLIZUMAB 50 mg Injection (EAMS)	0	0
PEMBROLIZUMAB	D79411	PEMBROLIZUMAB 50 mg Injection (FoC)	0	0
PEMETREXED	D49532	PEMETREXED (ALIMTA) 500 mg Injection		0
PEMETREXED	D67607	PEMETREXED (ALIMTA) 100 mg Injection		0
PEMETREXED	D80280	PEMETREXED (GENERIC) 500 mg Injection		0
PEMETREXED	D80279	PEMETREXED (GENERIC) 100 mg Injection		0
Trastuzumab	D79234	TRASTUZUMAB (SUBCUTANEOUS) 600 mg in 5mL Subcutaneous Injection	600	12600
Trastuzumab	D27604	TRASTUZUMAB (INTRAVENOUS) 150 mg Intravenous Infusion	150	28050
Trastuzumab	D79235	TRASTUZUMAB (HERCEPTIN HOMECARE) 600 mg in 5mL Subcutaneous Injection	600	49200
TRASTUZUMAB	D79253	TRASTUZUMAB EMTANSINE (KADCYLA) 160 mg in 8mL Powder for Infusion	0	0
TRASTUZUMAB	D79252	TRASTUZUMAB EMTANSINE (KADCYLA) 100 mg in 5mL Powder for Infusion	0	0

Welcome / Step 1 / Step 2 / Step 3 / Step 4 / Summary of Waste / PharmacyIssues Data / ProductMaps / SACT Data / SACTMaps

Commercial trial entered as 0mg

EAMS entered as 0mg

Trastuzumab Emtansine entered as 0mg Trastuzumab

If you notice any drug missing from your mapping table (e.g. Pegylated Liposomal Doxorubicin has proved difficult to automatically map due to variations in naming convention) you can add a new line to the mapping table manually. The first column (Column A) **must** contain the drug name *exactly* as it appears on the sheet "Summary of Waste". Column B must contain the exact pharmacy code, Column C the pharmacy product description, Column D the number of milligrams in the product and for Column E to G you should "drag down" the equation from the cell above it. (To do this click on the cell in column E directly above the row you are entering data in. You should see the cell highlighted like in the example below:
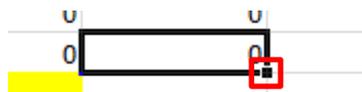
Place the mouse pointer over small square in the bottom right hand corner of the selected cell and click and drag the square down at the same time.

Once you have finished mapping your drug there should be no yellow boxes on the mapping table. Click the button marked **"Map SACT Data"**

USERS OF ASCRIBE / EMIS MANUFACTURING MODULE

If you use the Manufacturing Module in the EMIS Pharmacy System this will normally be configured to have products with variable amounts of drug in them. These can not be mapped (should be mapped to 0mg) – however – provided the component drugs are mapped this will provide the correct usage information. The diagram below briefly shows the transactions typically seen in the EMIS Manufacturing Module to prepare a 500mg Carboplatin dose

Component Drugs Charged to Cost Centre MANU from Stock:

NSV Code	Drug	Qty	Cost
NSV123A	Carboplatin 450mg Vial	1	10.00
NSV123B	Carboplatin 150mgVial	1	3.50
NSV123C	Glucose 5% 250mL	1	0.50

Completed Product Credited from MANU to Stock:

NSV Code	Drug	Qty	Cost
ZZZ001A	Carboplatin <variable> in 250mL Glucose 5%	1	14.00

Completed Product Charged from Stock to Cost Centre:

NSV Code	Drug	Qty	Cost
ZZZ001A	Carboplatin <variable> in 250mL Glucose 5%	1	14.00

Mapping the NSV123A and NSV123B products would show 600mg used and the corresponding SACT entry for the treatment should show 500mg given.

Mapping ZZZ001A is not required to account for this.

STEP 5: MAPPING SACT DATA

Like with the pharmacy mapping, you will need to identify some of the columns in the SACT file. The SACT file structure is prescribed by NHS Digital, however individual trusts may make slight variations in the column names of their file.

The three column you need to map are:

- Drug Name Field
- Dose for Administration Field

- Regimen Field

Simply select the three field names that match your data. They are likely to be very similar names but may have no spaces, dashes or underlines.

You will need to do this for both SACT version 2.0 files and SACT version 3.0 files as the field names may be different.

Once you have selected the appropriate field names select **"Merge SACT Data"** this will merge the SACT v2 and 3 files together. Then select **"Map SACT Data".**

STEP 6: MAPPING SACT DRUG NAMES & REGIMES

There are two elements to this mapping. Firstly you need to ensure the drugs are mapped correctly (as with pharmacy mapping Trastuzumab Emtansine may map to Trastuzumab for instance) and you need to identify any regimens which will not have corresponding drug data (either because it was excluded before being imported in, or has been mapped to 0mg in the pharmacy mapping.) This will allow you to exclude clinical trials by drug within a regime.

As with the pharmacy file the drug name in Column A must *exactly* match the drug name in the Summary of Waste Sheet. You can have multiple drugs mapped to the one drug e.g. Pemetrexed and Pemetrexed(Generic) in the example above.

If a clinical trial was to give Carboplatin + Pemetrexed + Nivolumab, and only the Nivolumab was provided free of charge by the sponsor and standard stock was used for the others your table for this might look like this:

Drug	SACT DRUG Name	Regime	Include Data?	Milligram use in Month 1
CARBOPLATIN	CARBOPLATIN	CT_CarboPemNivo	Yes	1500
PEMETREXED	PEMETREXED	CT_CarboPemNivo	Yes	2000
NIVOLUMAB	NIVOLUMAB	CT_CarboPemNivo	No	0

Once the regime mapping is complete click **"Show Summary of Waste"**

STEP 7: SUMMARY OF WASTE

The tool should display all the drugs you have used with the number of milligrams issued by pharmacy and the number of milligrams recorded as administered on SACT. The percentage waste should be shown. You may wish to review any negative percentages or very high percentages to ensure you have captured all the data you should have. However there will be legitimate reasons for negative percentages (e.g. drug charged from pharmacy on the last day of the month but not administered until the first day of the next month)

RTQ	2GETHER NHS FOUNDATION TRUST									Submit Data to NHS England
MONTH	**Sep-17**			**Oct-17**			**Nov-17**			
	number of milligrams			number of milligrams			number of milligrams			Does your Trust use NHS England Dose Bands for >80% of this drug?
Drug	issued from Pharmacy System	administered on Prescribing System	% waste	issued from Pharmacy System	administered on Prescribing System	% waste	issued from Pharmacy System	administered on Prescribing System	% waste	% waste for Quarter	
LIPOSOMAL DOXORUBICIN	-	-		-	-		-	-			
CABAZITAXEL	-	-		-	-		-	-			
CETUXIMAB	-	-		-	-		-	-			
PANITUMUMAB	-	-		-	-		-	-			
FLUOROURACIL	-	-		-	-		-	-			
DOCETAXEL	-	-		-	-		-	-			
CARBOPLATIN	-	-		-	-		-	-			
EPIRUBICIN	-	-		-	-		-	-			
IRINOTECAN	-	-		-	-		-	-			
CISPLATIN	-	-		-	-		-	-			
OXALIPLATIN	-	-		-	-		-	-			
CYTARABINE	-	-		-	-		-	-			
PACLITAXEL	-	-		-	-		-	-			
GEMCITABINE	-	-		-	-		-	-			
Your Email				**Submit Data to NHS England**						

A number of boxes are highlighted with red borders. Please answer these questions. The questions are:

Your Trust Name

The Month the Data Relates To (if it has not already been populated)

And for each drug:

If you apply NHS England Dose Bands to the product

How you supply the Product

If you compound this in-house what expiry you apply

(Unless you change practice you will be able to keep these results for future months)

STEP 8: SUBMIT THE DATA

When you are satisfied the data reasonably represents the amount on chemotherapy that was not administered to a patient you can submit your data to allow it to be bench marked.

Only the summary data is submitted. There may be patient identifiable data on the other sheets in the tool – this will not be submitted.

The submission will email a CSV file containing just the information on the summary page. (You will require an email application such as Outlook configured on the machine you are running the report from). If you do not have outlook configured, select manually submit, and save the file and send it by email to the address provided.

You should receive an automated email response confirming receipt.

If you submit a further version of the data for the same trust, for the same month the most recent version received will be used.

IMPORTING DATA FROM PREVIOUS VERSIONS OF THE TOOL

When a version upgrade occurs on the tool, you will need to import data from previous versions. On the Welcome Tab you will see a space to select the file that has the previous information in it. Click the "Browse" button to navigate to this file and locate it.
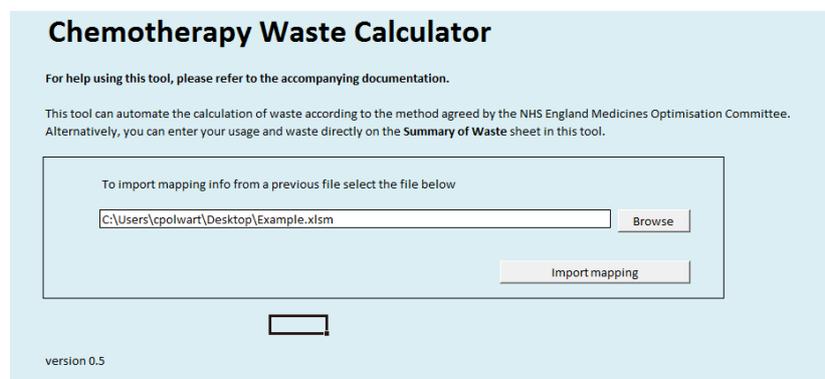
Then select **Import Mapping.** The tool will copy in all previous Product Mapping and SACT Mapping, plus options you have chosen previously for data headings and answers to additional information on the Summary Screen

You should now return to Step 1 and work through each screen – ensuring filenames are set correctly. Unless there are new products or SACT entries detected you should not need to do any additional steps – but you will need to work through each screen.

RE-IMPORTING PHARMACY DATA

If after mapping pharmacy data, a user returns to step 1 and re-imports the data (perhaps they have updated their data) – this will cause Excel to produce **#REF!** Errors on the Product Mapping Tab.

From version 1.2 these can be resolved by clicking the "Fix #Ref Errors" button on the Product Mapping Tab.

PROBLEMS OR QUESTIONS?

Please report any problems to england.ChemoWasteCquin@nhs.net

APPENDIX 1: 20 TARGETED MEDICINES

Listed below are the 20 Systemic Anti-Cancer Treatments NHS England has identified to bench mark for waste. These are 10 medicines of high expenditure and 10 high volume use medicines. There will be use of at least some of these medicines in all Cancer Units and Centres irrelevant of case mix and oncology, haemato-oncology or paediatric specialisation.

10 High Expenditure Medicines:

TRASTUZUMAB

PEMBROLIZUMAB

BORTEZOMIB

AZACITIDINE

PEMETREXED

NIVOLUMAB

LIPOSOMAL DOXORUBICIN (Pegylated Liposomal Doxorubicin: Caelyx)

CABAZITAXEL

CETUXIMAB

PANITUMUMAB

10 High Volume Medicines:

FLUOROURACIL

DOCETAXEL

CARBOPLATIN

EPIRUBICIN

IRINOTECAN

CISPLATIN

OXALIPLATIN

CYTARABINE

PACLITAXEL

GEMCITABINE

APPENDIX 2: EXAMPLE JAC EXTRACT

The table below shows a typical extract that might be produced from the JAC Pharmacy Computer System. (Additional data may also be in the extract). Only the columns in yellow are required to use this tool.

S number	Name	D	Drug	Formulation	Pack Size	Quantity and Pack	Doses	Quantity	Cost	Date
S123456	JANE SMITH	D11930	QUININE SULFATE	QUININE SULFATE 300 mg Tablets	28 Tablet Pack	1 x 28 Tablet Pack	28.00	1.00	£1.00	01/04/2017
S9876543	JOHN DOE	D12768	SIMVASTATIN	SIMVASTATIN 10 mg Tablets	28 Tablet Pack	1 x 28 Tablet Pack	28.00	1.00	£0.20	01/04/2017
S5678910	A PATIENT	D44754	BORTEZOMIB	BORTEZOMIB 3.5mg Injection	1 Vial Pack	1 x 1 Vial Pack	1.00	1.00	£900.00	03/04/2017
S5678910	A PATIENT	D44754	BORTEZOMIB	BORTEZOMIB 3.5mg Injection	1 Vial Pack	1 x 1 Vial Pack	1.00	1.00	£900.00	07/04/2017
S5678910	A PATIENT	D44754	BORTEZOMIB	BORTEZOMIB 3.5mg Injection	1 Vial Pack	1 x 1 Vial Pack	1.00	1.00	£900.00	10/04/2017
S9876543	JOHN DOE	D99999	CARBOPLATIN	CARBOPLATIN 450 mg Injection	1 Vial Pack	1 x 1 Vial Pack	1.00	1.00	£10.00	11/04/2017

APPENDIX 3: EXAMPLE EMIS / ASCRIBE EXTRACT

The table below shows a typical extract that might be produced from the EMIS Pharmacy Computer System. (Additional data may also be in the extract). Only the columns in yellow are required to use this tool.

Log Date Time	NSVCode	Label Description	CaseNo	Fullname	Qty	CostCentre	Cost
01/04/2017 08:50	DUX123A	QUININE SULFATE!300mg!Tablets	123456	JANE SMITH	28	WD1	1.00
01/04/2017 08:51	DVT001A	SIMVASTATIN!10mg!Tablets	987654	JOHN DOE	28	WD1	0.20
03/04/2017 12:53	ZZZ123A	BORTEZOMIB!3.5mg!Injection	5678910	A PATIENT	1	MANU	900.00
03/04/2017 12:53	ASE001A	BORTEZOMIB <variable> Syringe	5678910	A PATIENT	-1	MANU	901.00
03/04/2017 12:53	ASE001A	BORTEZOMIB <variable> Syringe	5678910	A PATIENT	1	WD2	901.00
07/04/2017 11:03	ZZZ123A	BORTEZOMIB!3.5mg!Injection	5678910	A PATIENT	1	MANU	900.00
07/04/2017 11:03	ASE001A	BORTEZOMIB <variable> Syringe	5678910	A PATIENT	-1	MANU	901.00
07/04/2017 11:03	ASE001A	BORTEZOMIB <variable> Syringe	5678910	A PATIENT	1	WD2	901.00
10/04/2017 12:16	ZZZ123A	BORTEZOMIB!3.5mg!Injection	5678910	A PATIENT	1	MANU	900.00
07/04/2017 12:16	ASE001A	BORTEZOMIB <variable> Syringe	5678910	A PATIENT	-1	MANU	901.00
07/04/2017 12:16	ASE001A	BORTEZOMIB <variable> Syringe	5678910	A PATIENT	1	WD2	901.00
11/04/2017 09:43	DVT009A	CARBOPLATIN!450mg!Injection	987654	JOHN DOE	1	WD1	15.00

VERSION CONTROL

Version	Date	Changes
1.0a	18 Jan 2019	▪ First version for National Use.
1.2a	24 Apr 2019	▪ Addition of code to fix #Ref! Errors on Pharmacy product Mapping when pharmacy data is re-imported into the same file (see page 15). ▪ Fix issue with NOCOSTS version if imported data does not have a Cost column. ▪ Minor fixes to headers. ▪ Updated Trust List. ▪ Provided upload email address.
1.3a	14 Jun 2019	▪ Sorted Trust List Alphabetically by Trust name. ▪ Trust list unhidden to aid merging trusts ▪ Fix issue with single use of a drug not being collected by mapping process.
2.0b	18 Oct 2019	▪ Handling SACT v2 & 3 files. ▪ Handling without Costs ▪ Remove * and ? from regime names ▪ Select folder if saving manually.

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