

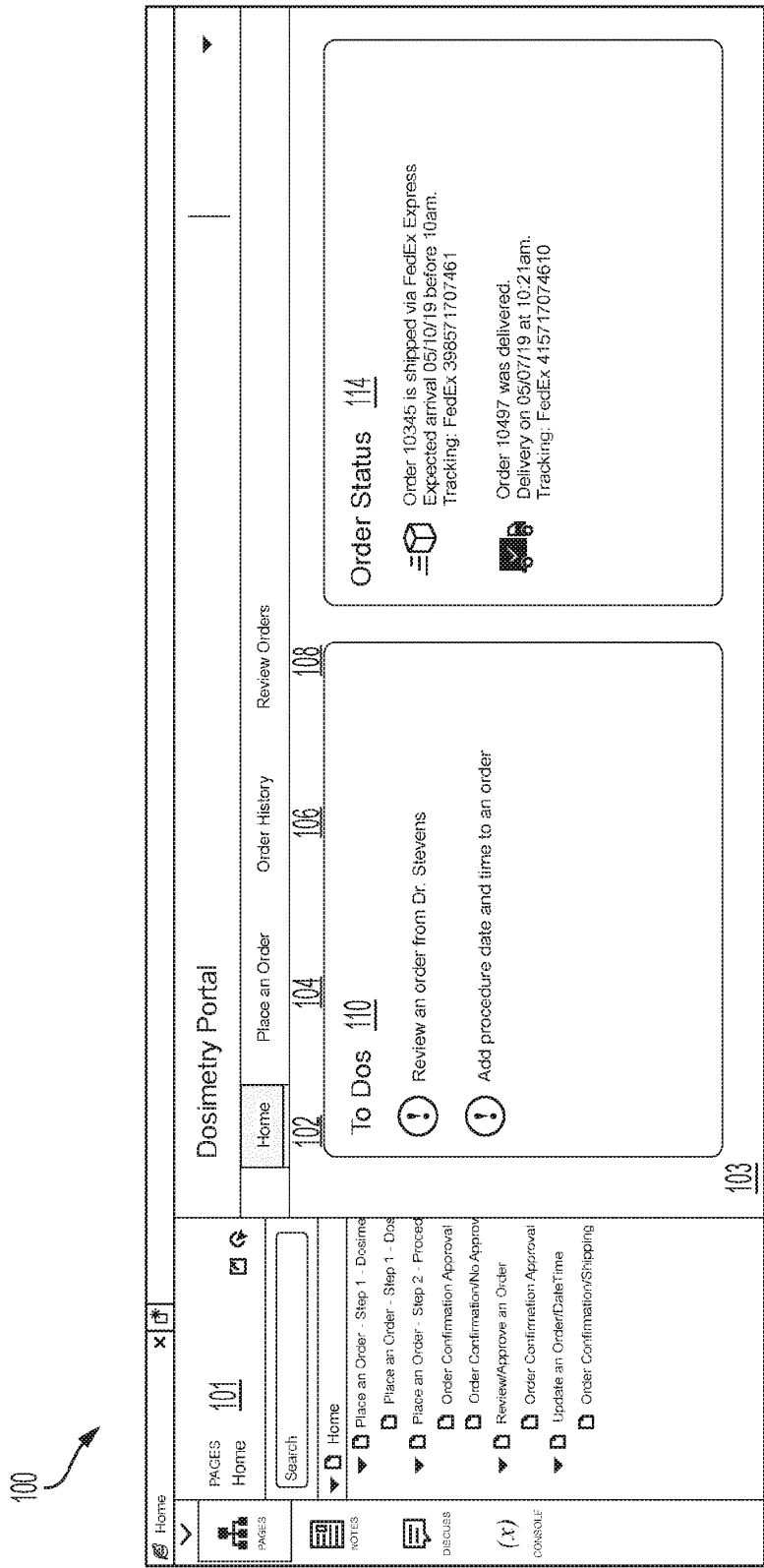


FIG. 1

Place an Order104, 200A

Dosimetry

Procedure Date and Shipping

Dosimetry Inputs202

Lung Shunt Fraction (%LSF)

2%

Anticipated Residual Waste (%)

1%

Previous Dose to the Lungs (Gy)

0

Desired Dose to Liver (Gy)

200

Target Liver Volume (cc)

300

Calculate

204

MIRD Calculation206

Target Liver Mass (kg)

0.31

Activity at Administration (GBq)

1.27

Calculated Dose to Lungs (Gy)

1.26

Dose Limit to Lungs (Gy)

30

Cumulative Dose to Lungs (Gy)

1.26

Cumulative Dose Limit to Lungs (Gy)

50

Order Details208

Based on your inputs, our recommendations for this order are:  
-Dose of 3 million spheres with activity of 425 Bq/Sphere -or-  
-Dose of 5 million spheres with activity of 255 Bq/Sphere

Sphere Selection

Select one

Activity Per Sphere (Bq/Sphere)

Activity to Be Ordered (GBq)

1.27

OPTIONAL-% Dose Modification (e.g. -10%)

OPTIONAL-Split Dose Across Vials (max 3)

Vial 1 (%)Vial 2 (%)Vial 3 (%)

Review Order

210

FIG. 2

Dosimetry Portal

Home

Place an Order104

Order History

Review Orders

Place an Order212

Dosimetry

Procedure Date and Shipping

Order Details214

Activity to Be Ordered  
1.27 GBq

Sphere Selection  
3 Million

Activity Per Sphere  
425 Bq/Sphere

% Dose Modification  
0%

Patient Target Dose  
200 Gy

Dosimetry Inputs216

Lung Shunt Fraction  
2%

Anticipated Residual Waste  
1%

Previous Dose to the Lungs  
0

Desired Dose to the Liver  
200 Gy

Target Liver Volume  
300 cc

MIRD Calculation218

Target Liver Mass  
0.31 kg

Activity at Administration  
1.27 GBq

Calculated Dose to Lungs  
1.26 Gy

Dose Limit to Lungs  
30 Gy

Cumulative Dose to Lungs  
1.26 Gy

Cumulative Dose Limit to Lungs  
50 Gy

220

Back

222

Confirm Order Details

FIG. 3

Dosimetry Portal

Home

Place an Order104

Order History

Review Orders

Place an Order230

☒

Dosimetry

☐

Procedure Date and Shipping

Procedure Date & Time

Would you like to enter the procedure date and shipping information now?

☒ Yes232

☐ No. Let me assign it to a colleague.238

Procedure Information234

Procedure Date

mm/dd/yyyy

Procedure Time

hh:mm

Time Zone

Select one

Shipping Information236

Enter the address where your hospital is approved to receive radioactive materials.

Shipment Receiver

Select one

\* Street address

e.g., 123 Main Street

\* City

FIG. 4

Dosimetry Portal

Home

Place an Order

Order History

Review Orders

✓

Place an Order

104

Dosimetry

Procedure Date and Shipping

Procedure Date & Time

Would you like to enter the procedure date and shipping information now?

☐ Yes

☒ No. Let me assign it to a colleague. 238

Info Alert. We will need the procedure date and time before we can begin manufacturing your order.

Colleague Name

Select one

240

242

Back

244

Save and Next

FIG. 5

| MIRD Dosimetry Info                                                                          |                          |
|----------------------------------------------------------------------------------------------|--------------------------|
| Time Zone (Drop Down)                                                                        | (UTC-7:00) Mountain Stan |
| Treatment Date (MM/DD/YYYY)                                                                  | 10/28/2018               |
| Treatment Time (Drop Down)                                                                   | 10:00 AM                 |
| Lung Shunt Fraction (%LSF)                                                                   | 3%                       |
| Anticipated Residual Waste (%)                                                               | 2%                       |
| Previous Dose to the Lungs (Gg)                                                              | 0                        |
| Desired Dose to Liver (Gg)                                                                   | 80                       |
| *Dose to perfused liver volume                                                               |                          |
| Target Liver Volume (cc)                                                                     | 1600                     |
| *Perfused liver volume exposed to Y                                                          |                          |
| MIRD Calculation                                                                             |                          |
| Target Liver Mass (kg)                                                                       | 1.65                     |
| Activity at Administration (GBq)                                                             | 2.77                     |
| Calculated Dose to Lungs (Gg)                                                                | 4.08                     |
| Dose Limit to Lungs (Gg)                                                                     | 30                       |
| Cumulative Dose to Lungs (Gg)                                                                | 4.08                     |
| Cumulative Dose Limit to Lungs (Gg)                                                          | 50                       |
| OPTIONAL - % Dose Modification                                                               | 0%                       |
| Activity to be Ordered (GBq)                                                                 | 2.77                     |
| Number of Spheres (REFERENCE)                                                                | 9 Million                |
| Sphere Selection (Drop Down - R)                                                             | 7.5 Million              |
| Activity and Sphere Selection Note (e.g. -Reduced activity due to previous chemo treatments- |                          |
| Standard Activity/Sphere                                                                     |                          |
| 300 Bq/Sphere                                                                                |                          |
| 370 Bq/Sphere                                                                                |                          |
| order                                                                                        |                          |
| Final Order Details                                                                          |                          |
| Patient Target Dose (Gg)                                                                     | 80                       |
| Required Activity at Treatment                                                               | 2.77                     |
| Number of Spheres                                                                            | 7.5 Million              |
| Bq per Sphere (Reference)                                                                    | 370                      |
| Date of Delivery (MM/DD/YYYY)                                                                |                          |

FIG. 6

200C

252

MIRD Dosimetry Info

Target Liver Volume (cc)

0

Desired Dose (Gy)

0

Time Zone (Drop Down)

Treatment Date (MM/DD/YYYY)

1/31/2020

Treatment Time (Drop Down)

Lung Shunt Fraction (%LSF)

0%

Anticipated Residual Waste (%)

0%

Previous Dose to the Lungs (Gy)

0

254

BSA Dosimetry Info

Total Liver Volume (cc)

0

Patient height (cm)

0

Patient weight (kg)

0

Target Tumor Volume (cc)

0

256

Partition Dosimetry Info

Target Dose to Tumor (Gy)

0

T/N Ratio

0

Lung Mass (kg)

0

Total Liver Mass (g)

0

Healthy Liver Mass (g)

0

Target Tumor Mass (g)

0

262

MIRD

Calculate

0.000

Target Liver Mass (kg)

0.00

Activity at Administration (GBq)

0.00

Calculated dose to lungs (Gy)

30

Dose limit to lungs (Gy)

0.00

Cumulative dose to lungs (Gy)

50

264

BSA

Calculate

0.0000

#DIV/0!

30

#DIV/0!

30

#DIV/0!

50

266

Partition

Calculate

0.0000

#DIV/0!

30

#DIV/0!

50

BACK

FIG. 7

|                                        |                                      |           |           |
|----------------------------------------|--------------------------------------|-----------|-----------|
| 262                                    | MIRD                                 | 266       | Partition |
| Calculate                              | Calculate                            | Calculate |           |
| 0.000                                  | 0.000                                | 0.000     |           |
| 0.00                                   | #DIV/0!                              | #DIV/0!   |           |
| 0.00                                   | #DIV/0!                              | #DIV/0!   |           |
| 30                                     | #DIV/0!                              | #DIV/0!   |           |
| 0.00                                   | #DIV/0!                              | #DIV/0!   |           |
| 50                                     | #DIV/0!                              | #DIV/0!   |           |
| Target Liver Mass (kg)                 |                                      |           |           |
| Activity at Administration (GBq)       |                                      |           |           |
| Calculated dose to lungs (Gy)          |                                      |           |           |
| Dose limit to lungs (Gy)               |                                      |           |           |
| Cumulative dose to lungs (Gy)          |                                      |           |           |
| Cumulative dose limit to lungs (Gy)    |                                      |           |           |
| Optional Select Treatment Type         | 270                                  | #N/A      | Bq/sphere |
| Optional Recommended Number of Spheres | 272                                  | #VALUE!   | Million   |
| Sphere Selection (Drop Down)           | Million                              |           |           |
| Activity Selection (Drop Down)         | q                                    |           |           |
| % Dose Modification (e.g. -%10)        | 0%                                   |           |           |
| Required Activity                      | #VALUE!                              |           | GBq       |
| 278                                    | Final Order Details                  | 276       |           |
| ORDER                                  | Patient Target Dose (Gy)             | 0         |           |
|                                        | Required Activity at Treatment (GBq) | #VALUE!   |           |
|                                        | Number of Spheres                    | 0         | Million   |
|                                        | GBq per sphere (Reference)           | #VALUE!   |           |
|                                        | Date of Delivery                     | 3/20/2018 |           |

FIG. 8

Y90 ORDER FORM 280

Phone:

Please Fax or Email

Y90 Order Form and

Treatment Plan (if applicable):

FAX:

or

ATTN To:

Facility Name:

Address:

City, State, Zip:

Person Placing Order:

Phone Number:

Special Comments:

Patient Name:

Physician Name:

Purchase Order Number:

Billing (Check One)

☐ Bill to☐ Same as above

CONFIDENTIAL-- WORKSHEET IS FOR REFERENCE ONLY. NOT FOR CLINICAL USE.

Order Date:

Time Zone:

Treatment Date:

Treatment Time:

Treatment Activity Required:

Number of Spheres:

Delivery Date:

5/9/2019

Not Specified

1/0/1900

Not Specified

#VALUE!

Not Specified

3/20/2018

If activity is to be split over multiple vials, please specify split below:

Optional:

Vial

Enter Percent

Activity (GBq)

| 1       | 2       | 3       | Total   |
|---------|---------|---------|---------|
| 100%    | 0%      | 0%      | 100%    |
| #VALUE! | #VALUE! | #VALUE! | #VALUE! |

282

FIG. 9

# Approve Order

## Patient Information

Medical Record Number

2813318004

Lung Shunt Fraction ?

3 (%LSF)

Anticipated Residual Waste ?

2 %

Previous Dose to the Lungs ?

0 Gy

Desired Dose ?

80 Gy

Targeted Liver Volume ?

1600 cc

Targeted Liver Mass

165 kg

Sphere Selection

40 Million ▼

Optional - % Dosage Modification (e.g. -10%)

0 %

## Scheduling

Date &amp; Time of Operation

12/3/2018 9:00AM 

Time Zone

UTC-4:00 Atlantic Standard Time ▼

Street Address

1 Begton Drive, Franklin Lakes 07417

State

New Jersey ▼

Zip Code

07470

Contact email

pocAdmin@bd.com

300

## Dosimetry Outputs

Activity of Administration

2.77 GBq

Calculated Dose to Lungs

4.08 Gy

Dose Limit to Lungs

30 Gy

Cumulative Dose to Lungs

4.08 Gy

Cumulative Dose Limit to Lungs

50 Gy

| Activity to be Ordered         |         | Standard Activity/Sphere |           |
|--------------------------------|---------|--------------------------|-----------|
| 2.77                           | GBq     | 69                       | Bq/Sphere |
| Recommended Number of Spheres  |         | Standard Activity/Sphere |           |
| 2                              | Million | 300                      | Bq/Sphere |
| Split dose over multiple Vials |         |                          |           |

## Order Status

Needs Approval ▼

Save

302

FIG. 10

[illegible]







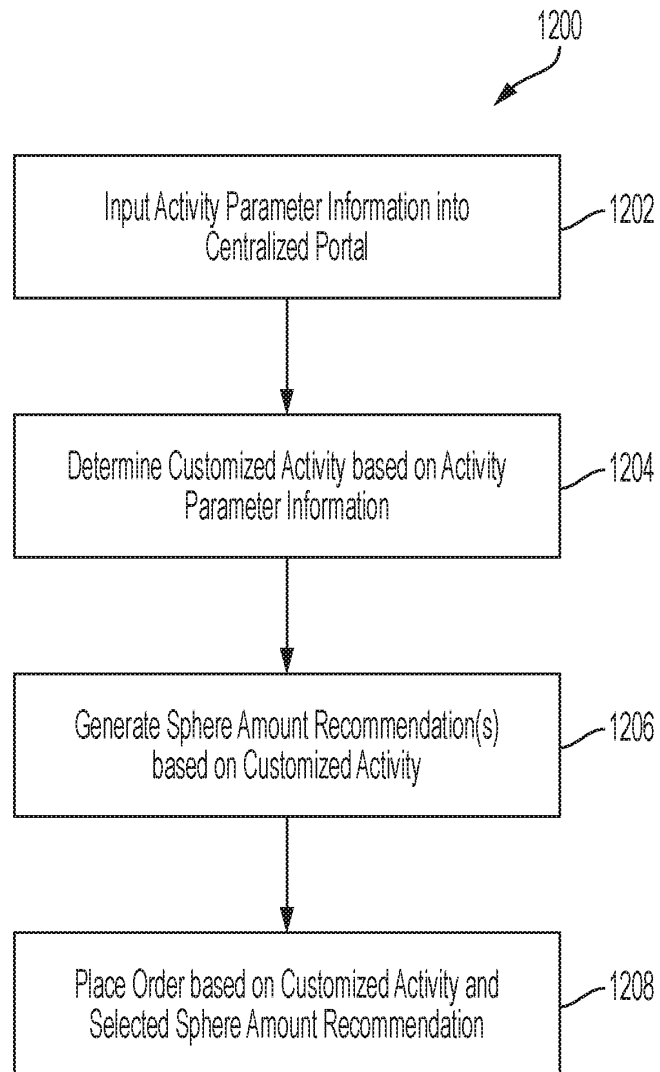



FIG. 12

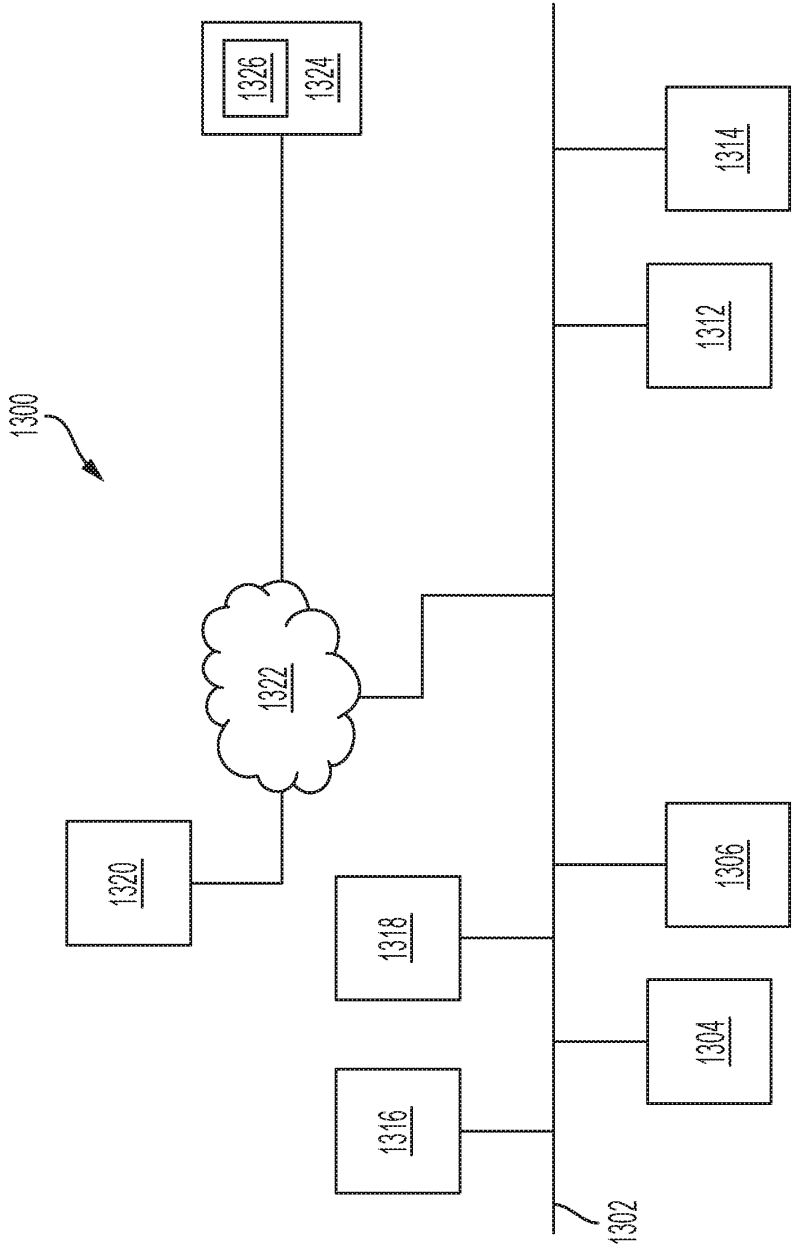


FIG. 13