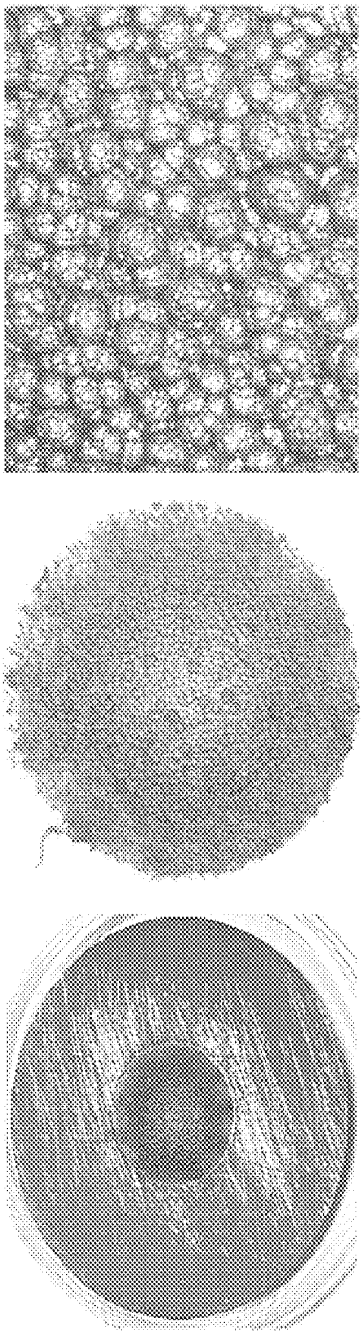


FIG. 1

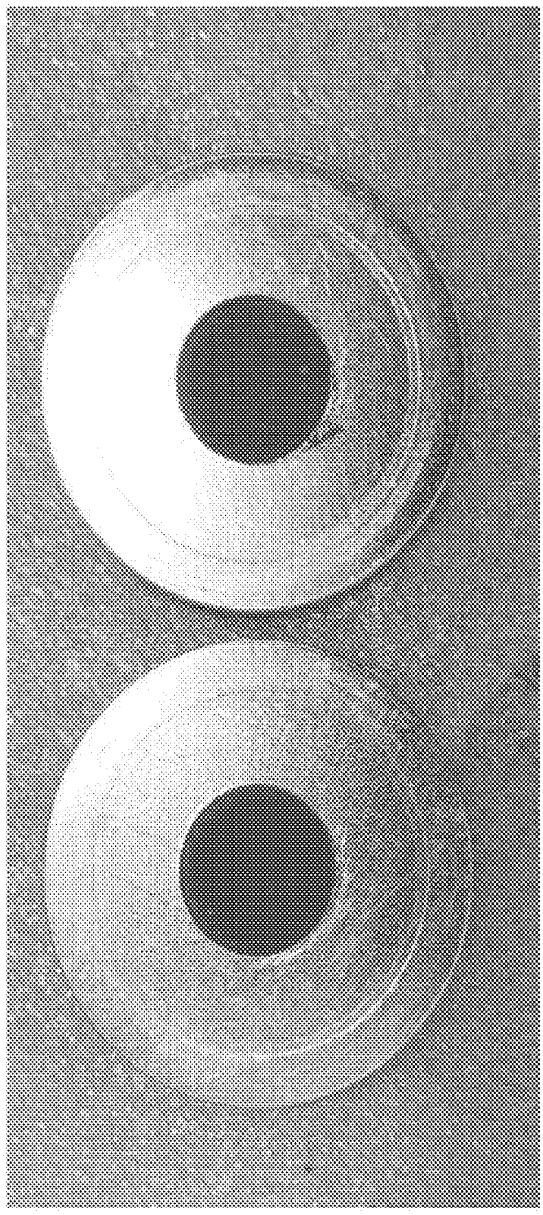


FIG. 2

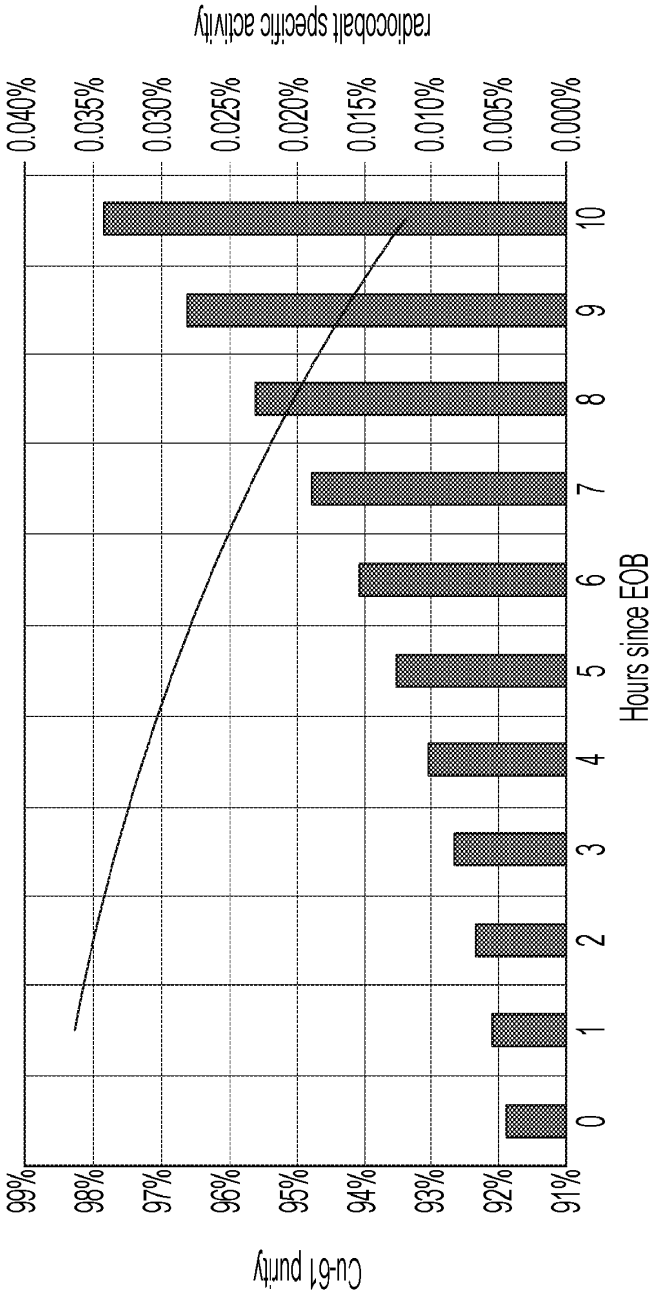

radiocobalt specific activity
0.040%
0.035%
0.030%
0.025%
0.020%
0.015%
0.010%
0.005%
0.000%
Hours since EOB
0
1
2
3
4
5
6
7
8
9
10
Cu-61 purity
99%
98%
97%
96%
95%
94%
93%
92%
91%

FIG. 3

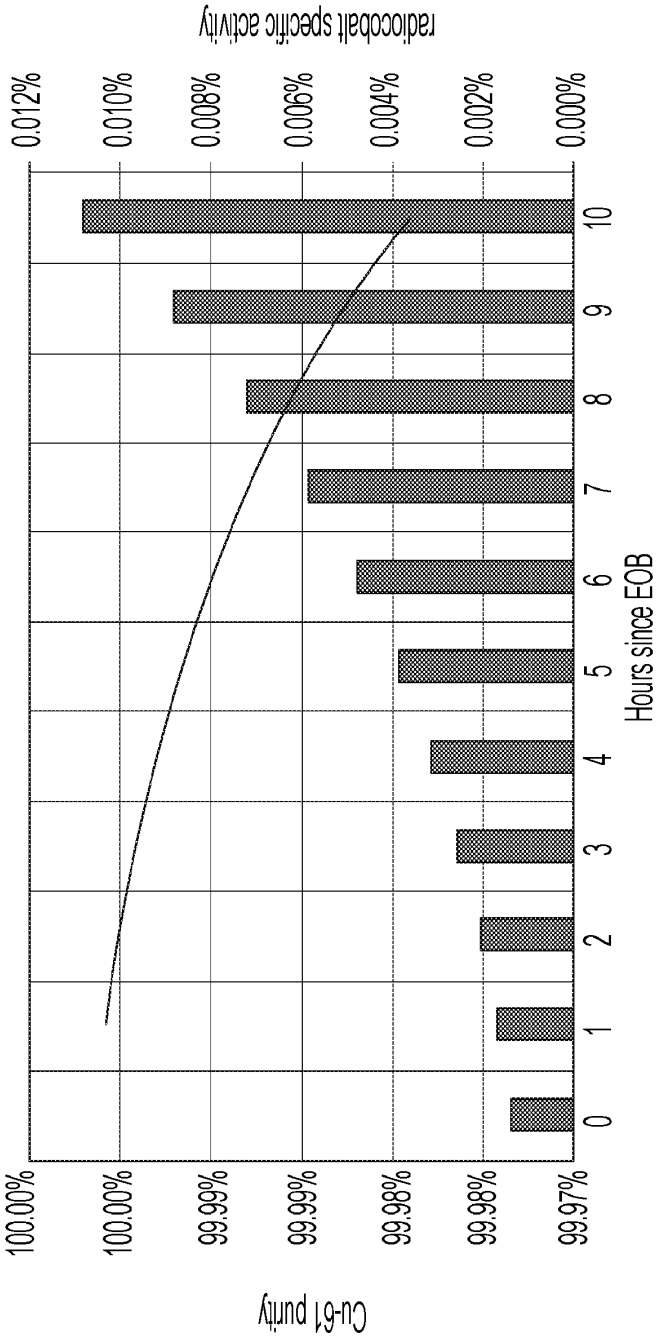

radiocobalt specific activity
0.012%
0.010%
0.008%
0.006%
0.004%
0.002%
0.000%
Hours since EOB
0
1
2
3
4
5
6
7
8
9
10
Cu-61 purity
100.00%
100.00%
99.99%
99.99%
99.98%
99.98%
99.97%

FIG. 4

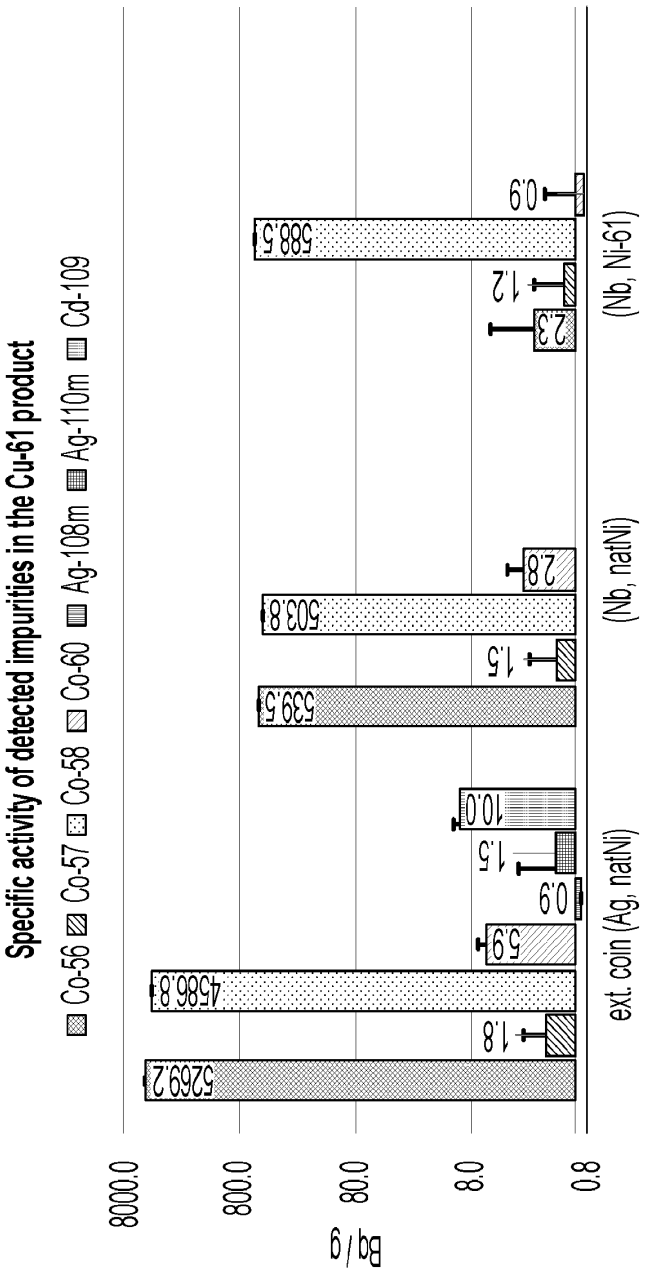

Specific activity of detected impurities in the Cu-61 product
Co-56 Co-57 Co-58 Co-60 Ag-108m Ag-110m Cd-109
Bq/g
8000.0
800.0
80.0
8.0
0.8
5269.2
1.8
4586.8
5.9
0.9
1.5
10.0
539.5
1.5
503.8
2.8
588.5
0.9
2.3
1.2
ext. coin (Ag, natNi)
(Nb, natNi)
(Nb, Ni-61)

FIG. 5

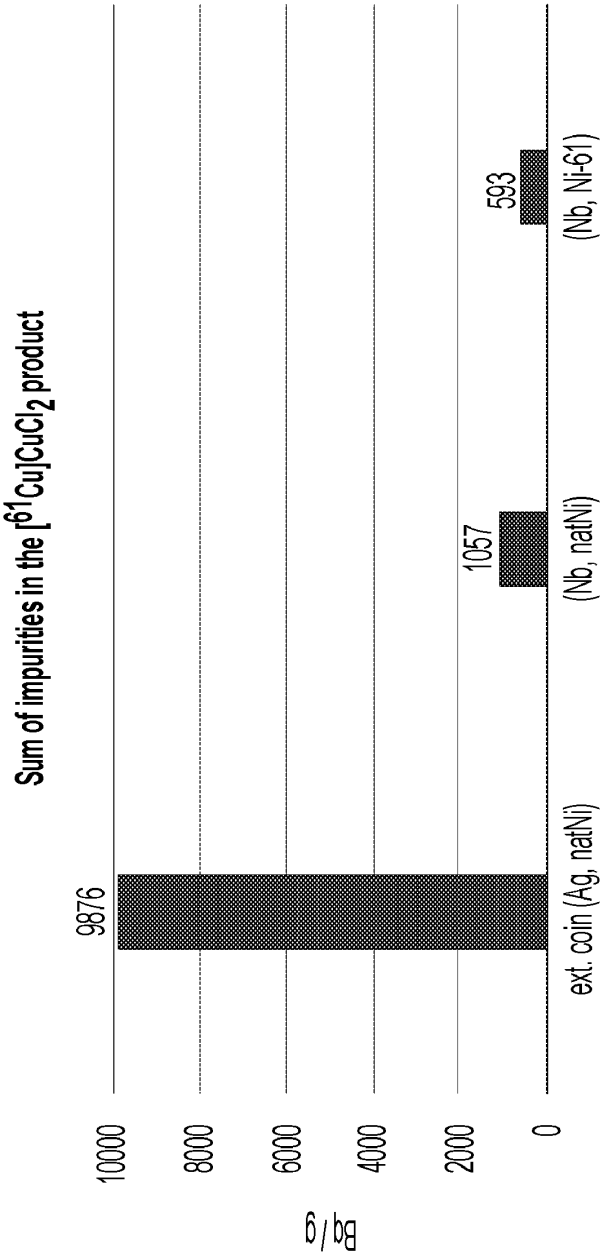

Sum of impurities in the [61Cu]CuCl2 product
Bq/g
10000
8000
6000
4000
2000
0
9876
1057
593
ext. coin (Ag, natNi)
(Nb, natNi)
(Nb, Ni-61)

FIG. 6

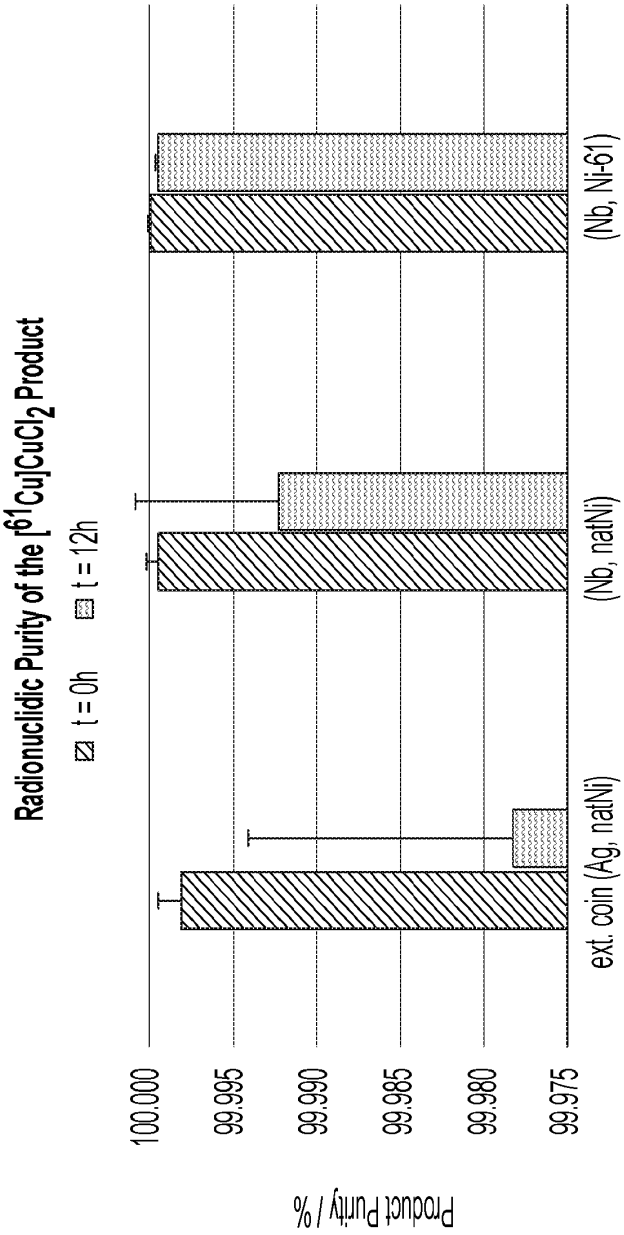

Radionuclidic Purity of the [61Cu]CuCl2 Product
t = 0h
t = 12h
100.000
99.995
99.990
99.985
99.980
99.975
Product Purity / %
ext. coin (Ag, natNi)
(Nb, natNi)
(Nb, Ni-61)

FIG. 7

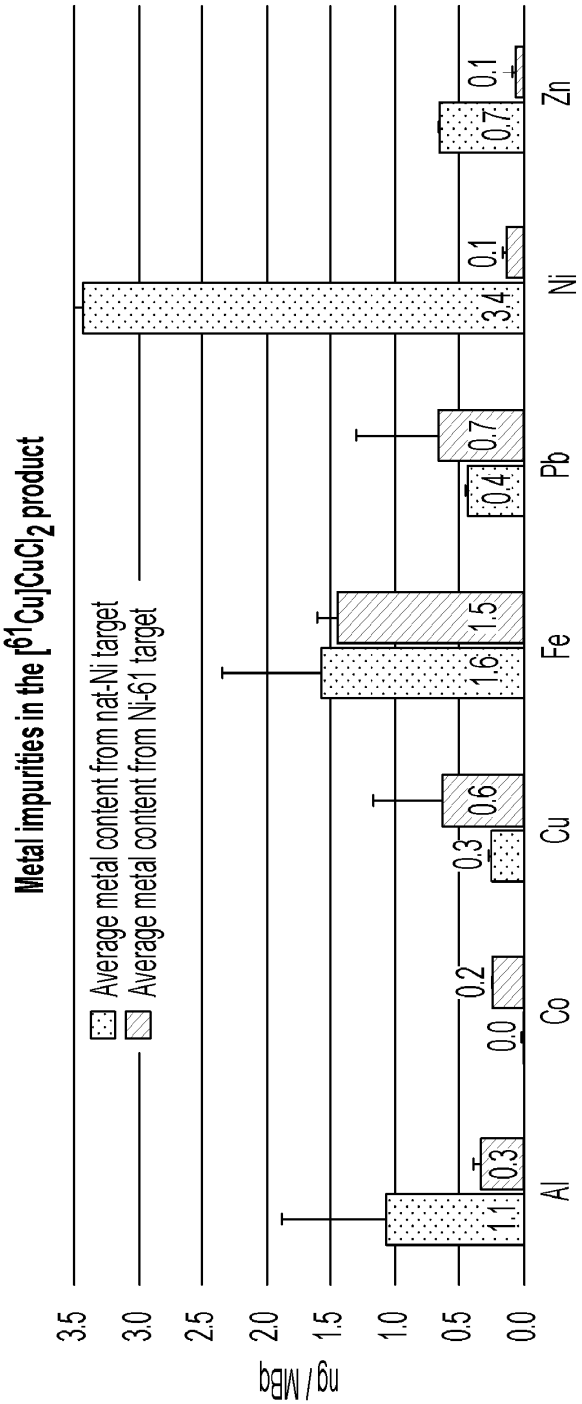

Metal impurities in the [61Cu]CuCl2 product
Average metal content from nat-Ni target
Average metal content from Ni-61 target
ng / MBq
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Al
Co
Cu
Fe
Pb
Ni
Zn
1.1
0.3
0.0
0.2
0.3
0.6
1.6
1.5
0.4
0.7
3.4
0.1
0.7
0.1

FIG. 8