Patient 103 (Leukemia)

Medications

Zosyn
Zosyn
TMP−SMX
Pentamidine
Daptomycin
Cefepime
Amikacin

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Blautia
Coprococcus
Lactococcus

−13
−1
9
14

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Lactococcus
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 112 (Multiple Myeloma)

Medications

Zosyn
Vancomycin
Metronidazole
Metronidazole
Metronidazole
Levofloxacin
Cefazolin

Relative Abundance

100%
75%
50%
25%
0%

Streptococcus
Blautia
Enterococcus
Enterococcus
Enterococcus
Enterococcus

−8
−2
5
7
12
19

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Other Firmicutes
- Other Bacteria

Patient 114 (Multiple Myeloma)

Medications

Zosyn
Vancomycin
Pentamidine
Augmentin
Pentamidine

Relative Abundance

100%
75%
50%
25%
0%

Streptococcus
Coprobacillus
Coprobacillus

−8
6
12

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 117 (Leukemia)

Medications

Vancomycin

TMP−SMX

Cefepime

Atovaquone

Relative Abundance

100%

75%

50%

25%

0%

Blautia

Blautia

Lactobacillus

Lactobacillus

Lactobacillus

−7

−3

3

15

19

−10

0

10

20

30

Transplant day

Bacteria phylotypes

Enterococcus

Streptococcus

Blautia

Bacteroides

Proteobacteria

Dorea

Lactobacillus

Coprobacillus

Staphylococcus

unclassified_Lachnospiraceae

Roseburia

Coprococcus

Parabacteroides

Lactococcus

Veillonella

Granulicatella

Other Firmicutes

Other Bacteroidetes

Other Bacteria

Patient 119 (Lymphoma)

Medications

Zosyn
Zosyn
Vancomycin
Vancomycin
TMP−SMX
Cefpodoxime
Aztreonam
Azithromycin

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Streptococcus
Enterococcus
Streptococcus

−1
6
19

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 120 (Myelodysplastic Syndrome)

Medications

Zosyn
Vancomycin
TMP−SMX
Zosyn
Vancomycin
Pentamidine

Relative Abundance

100%
75%
50%
25%
0%

Enterococcus
Enterococcus
Proteobacteria
Veillonella
Other Firmicutes
Proteobacteria
Enterococcus
Proteobacteria

−3
−1
4
14
17

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 121 (Leukemia)

Medications

Zosyn
Vancomycin
TMP−SMX
TMP−SMX
Pentamidine
Metronidazole
Levofloxacin
Cefepime
Atovaquone
Atovaquone

Relative Abundance

100%
75%
50%
25%
0%

Other Firmicutes
Other Firmicutes
Other Firmicutes
Streptococcus
Streptococcus

−7
−4
−1
6
10

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 130 (Multiple Myeloma)

Medications

Zosyn
Vancomycin
TMP−SMX
Metronidazole
Ciprofloxacin
Atovaquone

Relative Abundance

100%
75%
50%
25%
0%

Streptococcus
Enterococcus
Other Bacteria
Proteobacteria
Staphylococcus

−3
2
7
11

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 132 (Leukemia)

Medications

Zosyn
Zosyn
Vancomycin
Vancomycin
TMP−SMX
Cefepime
Ampicillin

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Staphylococcus
Staphylococcus
Enterococcus
Staphylococcus

−8
0
13
19

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 133 (Multiple Myeloma)

Medications

Zosyn
Vancomycin
TMP−SMX
Imipenem
Vancomycin
Levofloxacin
Cefepime

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Parabacteroides
Staphylococcus

−6
−1
3
13

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 134 (Leukemia)

Medications

Relative Abundance

100%
75%
50%
25%
0%

Enterococcus
Enterococcus
Enterococcus

−5
4
12

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteria

Patient 138 (Leukemia)

Medications

Zosyn
Vancomycin
Pentamidine
Pentamidine
Pentamidine
Imipenem
Cefepime
Azithromycin

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Other Firmicutes
Other Firmicutes
Streptococcus
Streptococcus
Lactococcus
Lactococcus

−7
2
4
5
12

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 139 (Leukemia)

Medications

Zosyn
Vancomycin
TMP−SMX
TMP−SMX
Cefepime

Relative Abundance

100%
75%
50%
25%
0%

Other Firmicutes
Other Firmicutes
Staphylococcus
Staphylococcus

−8
−3
5
11

−10
0
10
20
30

Transplant day

Bacteria phylotypes
Enterococcus
Streptococcus
Blautia
Bacteroides
Proteobacteria
Dorea
Lactobacillus
Coprobacillus
Staphylococcus
unclassified_Lachnospiraceae
Roseburia
Coprococcus
Lactococcus
Veillonella
Granulicatella
Other Firmicutes
Other Bacteroidetes
Other Bacteria

Patient 142 (Leukemia)

Medications

Vancomycin
Vancomycin
Pentamidine
Metronidazole
Linezolid
Linezolid
Gentamicin
Cefepime
Atovaquone
Atovaquone
Amikacin
Amikacin

Relative Abundance

100%
75%
50%
25%
0%

Dorea
Dorea
Enterococcus
Enterococcus
Lactobacillus

−4
−2
7
12
18

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 143 (Lymphoma)

Medications

TMP−SMX

Augmentin

Relative Abundance

100%

75%

50%

25%

0%

Blautia

Blautia

−5

3

13

−10

0

10

20

30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 144 (Lymphoma)

Medications

TMP−SMX

Vancomycin

Pentamidine

Blautia

−5

1

8

12

Relative Abundance

100%

75%

50%

25%

0%

−10

0

10

20

30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 145 (Myelodysplastic Syndrome)

Medications

Zosyn
Vancomycin
TMP−SMX
Pentamidine
Ciprofloxacin
Cefepime
Cefazolin
Aztreonam
Amikacin
Amikacin

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Other Firmicutes
Lactococcus
Streptococcus

−6
7
14
35

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 149 (Leukemia)

Medications

Zosyn
Zosyn
Zosyn
Vancomycin
TMP−SMX
Pentamidine
Pentamidine
Linezolid
Imipenem
Imipenem
Atovaquone

Relative Abundance

100%
75%
50%
25%
0%

Streptococcus
Staphylococcus
Proteobacteria

−2
4
12
18

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 152 (Leukemia)

Medications

Zosyn
Vancomycin
Vancomycin
TMP−SMX
Pentamidine
Linezolid
Levofloxacin
Ciprofloxacin
Ciprofloxacin

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Blautia
Enterococcus
Staphylococcus
Other Firmicutes

−6
0
7
14
21

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Lactococcus
- Veillonella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 153 (Leukemia)

Medications

Vancomycin
Vancomycin
Vancomycin
TMP−SMX
Pentamidine
Metronidazole
Linezolid
Cefepime

Relative Abundance

100%
75%
50%
25%
0%

−9
−1
6
11
17
25

Enterococcus
Enterococcus
Enterococcus
Other Firmicutes
Other Firmicutes

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 154 (Lymphoma)

Medications

TMP−SMX

Zosyn

Pentamidine

Augmentin

Relative Abundance

100%

75%

50%

25%

0%

Other Firmicutes

−3

4

5

12

−10

0

10

20

30

Transplant day

Bacteria phylotypes

- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 155 (Lymphoma)

Medications

Zosyn
Vancomycin
Pentamidine
Metronidazole
Cefepime
Atovaquone

Relative Abundance

100%
75%
50%
25%
0%

Streptococcus
Granulicatella
Lactobacillus
Granulicatella
Other Firmicutes

−2
7
11
18

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 156 (Leukemia)

Medications

Vancomycin
Vancomycin
Vancomycin
Vancomycin
TMP−SMX
Polymyxin B
Polymyxin B
Polymyxin B
Pentamidine
Metronidazole
M
Linezolid
Imipenem
Imipenem
Ertapanem
Cefepime
Aztreonam
Azithromycin
Azithromycin
Amikacin

Relative Abundance

100%
75%
50%
25%
0%

Proteobacteria
Staphylococcus
Enterococcus

−4
4
10

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 157 (Leukemia)

Medications

Zosyn
Vancomycin
TMP−SMX
Metronidazole
Cefepime
Zosyn
Vancomycin
Pentamidine
Metronidazole
Cefepime

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Other Firmicutes
Other Firmicutes
Streptococcus
Streptococcus

−11
−3
4
12

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 158 (Lymphoma)

Medications

Zosyn
Vancomycin
TMP−SMX
TMP−SMX
Metronidazole
Imipenem
Daptomycin
Ciprofloxacin
Ampicillin

Relative Abundance

100%
75%
50%
25%
0%

Enterococcus
Enterococcus
Enterococcus

−2
6
18

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 161 (Myelodysplastic Syndrome)

Medications

Zosyn
Vancomycin
TMP−SMX
Pentamidine
Imipenem
Cefazolin
Amikacin

Relative Abundance

100%
75%
50%
25%
0%

Streptococcus
Veillonella

−3
5
16

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 162 (Leukemia)

Medications

Vancomycin
Vancomycin
Vancomycin
Vancomycin
Pentamidine
Pentamidine
Metronidazole
Levofloxacin
Cefepime
Aztreonam
Azithromycin

Relative Abundance

100%
75%
50%
25%
0%

Enterococcus
Lactobacillus
Enterococcus
Lactobacillus
Enterococcus
Enterococcus
Enterococcus
Enterococcus

−9
−2
5
17
27
32

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 164 (Leukemia)

Medications

Vancomycin
Vancomycin
Vancomycin
Metronidazole
Metronidazole
Metronidazole
Imipenem
Cefepime
Atovaquone

Relative Abundance

100%
75%
50%
25%
0%

Streptococcus
Streptococcus

−3
3
13

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Other Firmicutes
- Other Bacteria

Patient 166 (Lymphoma)

Medications

Zosyn
Vancomycin
Vancomycin
Pentamidine
Metronidazole
Metronidazole
Cefazolin

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Proteobacteria
Streptococcus
Proteobacteria
Granulicatella

−9
0
12
18

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 167 (Leukemia)

Medications

Zosyn

Vancomycin

Vancomycin

Pentamidine

Metronidazole

Metronidazole

Linezolid

Imipenem

Cefazolin

Azithromycin

Azithromycin

Azithromycin

Azithromycin

Azithromycin

Relative Abundance

100%

75%

50%

25%

0%

Blautia

Enterococcus

Enterococcus

Enterococcus

−9

4

15

22

28

−10

0

10

20

30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 172 (Lymphoma)

Medications

Relative Abundance

100%
75%
50%
25%
0%

Streptococcus
Bacteroides
Bacteroides
Bacteroides
Bacteroides
Bacteroides
Staphylococcus
Bacteroides
Staphylococcus
Bacteroides

−14
1
12
18
25
27
29
32

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 173 (Myelodysplastic Syndrome)

Medications

Vancomycin

Levofloxacin

Cefepime

Relative Abundance

100%

75%

50%

25%

0%

Bacteroides

Bacteroides

Parabacteroides

−5

−2

6

12

−10

0

10

20

30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 175 (Myelodysplastic Syndrome)

Medications

Zosyn

Vancomycin

Pentamidine

Cefepime

Relative Abundance

100%

75%

50%

25%

0%

Blautia

Bacteroides

Bacteroides

Bacteroides

−7

0

21

27

−10

0

10

20

30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 177 (Leukemia)

Medications

Vancomycin

Pentamidine

Linezolid

Clindamycin

Cefazolin

Aztreonam

Relative Abundance

100%

75%

50%

25%

0%

Blautia

Dorea

Enterococcus

Other Firmicutes

−2

4

11

−10

0

10

20

30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 178 (Other)

Medications

Zosyn
Vancomycin
Vancomycin
TMP−SMX
Pentamidine
Azithromycin

Relative Abundance

100%
75%
50%
25%
0%

Dorea
Granulicatella
Dorea
Granulicatella
Other Firmicutes
Coprobacillus
Coprobacillus
Other Firmicutes

−9
−3
4
11
18
21
25

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 179 (Leukemia)

Medications

Vancomycin
Vancomycin
Vancomycin
Pentamidine
Metronidazole Metronidazole
Aztreonam
Azithromycin
Azithromycin

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Blautia
Blautia
Enterococcus

−6
−2
6
12
19
22
26
33

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 182 (Leukemia)

Medications

Zosyn
Vancomycin
Pentamidine
Metronidazole
Metronidazole
Metronidazo
Linezolid
Linezolid
Ciprofloxac
Amikacin

Relative Abundance

100%
75%
50%
25%
0%

Enterococcus
Enterococcus
Enterococcus
Enterococcus

−4
3
11
17

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Coprococcus
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 183 (Leukemia)

Medications

Zosyn

Vancomycin

Pentamidine

Relative Abundance

100%

75%

50%

25%

0%

Other Firmicutes

Blautia

Other Bacteria

Lactobacillus

Staphylococcus

−9

−3

4

11

19

−10

0

10

20

30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 184 (Leukemia)

Medications

Vancomycin

Pentamidine

Imipenem

Cephalexin

Relative Abundance

100%

75%

50%

25%

0%

Enterococcus

−2

3

13

−10

0

10

20

30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 186 (Lymphoma)

Medications

Metronidazole

Relative Abundance

100%
75%
50%
25%
0%

Dorea
Enterococcus
Enterococcus
Enterococcus
Enterococcus

−1
5
6
7
12

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 188 (Leukemia)

Medications

Zosyn

Vancomycin

Pentamidine

Imipenem

Relative Abundance

100%

75%

50%

25%

0%

Bacteroides

Parabacteroides

Bacteroides

Bacteroides

Bacteroides

Bacteroides

−6

−1

5

13

19

26

−10

0

10

20

30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 189 (Leukemia)

Medications

Vancomycin

TMP−SMX

Pentamidine

Relative Abundance

100%

75%

50%

25%

0%

Bacteroides

Bacteroides

Bacteroides

−5

−2

5

12

−10

0

10

20

30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 190 (Myelodysplastic Syndrome)

Medications

Zosyn
Vancomycin
Vancomycin
Pentamidine
Metronidazole
Metronidazole
Levofloxacin
Levofloxacin
Imipenem
Cefazolin

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Proteobacteria
Staphylococcus
Staphylococcus

−10
−2
5
12

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 191 (Leukemia)

Medications

Zosyn

Vancomycin

Vancomycin

Vancomycin

Imipenem

Relative Abundance

100%

75%

50%

25%

0%

Blautia

Dorea

Proteobacteria

Lactobacillus

Veillonella

Proteobacteria

Lactobacillus

Lactobacillus

−5

−2

9

12

20

26

33

−10

0

10

20

30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 192 (Leukemia)

Medications

Vancomycin
Vancomycin
Pentamidine
Cefepime
Aztreonam
Aztreonam
Azithromycin

Relative Abundance

100%
75%
50%
25%
0%

Other Firmicutes
Bacteroides
Bacteroides
Proteobacteria
Proteobacteria
Lactobacillus

−3
1
7
16
21
28

−10
0
10
20
30

Transplant day

Bacteria phylotypes
Enterococcus
Streptococcus
Blautia
Bacteroides
Proteobacteria
Dorea
Lactobacillus
Coprobacillus
Staphylococcus
unclassified_Lachnospiraceae
Roseburia
Coprococcus
Lactococcus
Veillonella
Granulicatella
Other Firmicutes
Other Bacteroidetes
Other Bacteria

Patient 193 (Multiple Myeloma)

Medications

Zosyn

Vancomycin

Augmentin

Azithromycin

Atovaquone

Relative Abundance

100%

75%

50%

25%

0%

Bacteroides

Bacteroides

Streptococcus

Streptococcus

−10

−3

4

11

−10

0

10

20

30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 194 (Leukemia)

Medications

Vancomycin
TMP−SMX
Pentamidine
Linezolid
Imipenem
Cefepime

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Dorea
Enterococcus
Bacteroides
Streptococcus
Proteobacteria
Dorea

−9
−4
4
10
19
27

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 195 (Myelodysplastic Syndrome)

Medications

Zosyn

Vancomycin

Relative Abundance

100%

75%

50%

25%

0%

Other Bacteria

Parabacteroides

Bacteroides

−2

5

10

12

−10

0

10

20

30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 196 (Myelodysplastic Syndrome)

Medications

Vancomycin

Imipenem

Cefepime

Pentamidine

Relative Abundance

100%

75%

50%

25%

0%

−6

−2

13

22

Lactobacillus

Lactobacillus

−10

0

10

20

30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 197 (Lymphoma)

Medications

Vancomycin
Vancomycin
Vancomycin
Vancomycin
Vancomycin
Gentamicin
Clindamycin
Aztreonam
Atovaquone

Relative Abundance

100%
75%
50%
25%
0%

Other Firmicutes
Other Firmicutes
Bacteroides

−5
−2
5
7
13

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 198 (Multiple Myeloma)

Medications

Zosyn
Vancomycin
TMP−SMX
Atovaquone
Atovaquone

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Bacteroides
Bacteroides

−9
6
13

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 200 (Lymphoma)

Medications

Zosyn
Vancomycin
Zosyn
Vancomycin
Pentamidine
Imipenem
Cefazolin

Relative Abundance

100%
75%
50%
25%
0%

Streptococcus
Streptococcus
Lactococcus
Proteobacteria

−6
−3
11
13
22
25

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 201 (Leukemia)

Medications

Zosyn
Vancomycin
Vancomycin
Vancomycin
Pentamidine
Metronidazole
Metronidazole
Imipenem
Atovaquone

Relative Abundance

100%
75%
50%
25%
0%

Other Firmicutes
Enterococcus
Enterococcus
Enterococcus
Enterococcus
Proteobacteria
Veillonella

−4
3
11
17
24
31

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Lactococcus
- Veillonella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 202 (Leukemia)

Medications

Zosyn
Vancomycin
Vancomycin
Pentamidine
Cefazolin
Aztreonam

Relative Abundance

100%
75%
50%
25%
0%

Dorea
Streptococcus
Streptococcus
Enterococcus
Enterococcus

−4
3
11
18
26

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 203 (Leukemia)

Medications

Zosyn
Vancomycin
Vancomycin
VancomycinVancomycin
Tobramycin
Pentamidine
Metronidazole
Metronidazole
Meropenem
Linezolid
Linezolid
Imipenem

Relative Abundance

100%
75%
50%
25%
0%

Streptococcus
Blautia
Enterococcus
Enterococcus
Proteobacteria
Streptococcus
Enterococcus
Enterococcus

−5
−2
5
12
19
26
35

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 205 (Leukemia)

Medications

Vancomycin
Vancomycin
Vancomycin
Tobramycin
Pentamidine
Metronidazole
Metronidazole
Metronidazole
Linezolid
Imipenem
Cefepime
Aztreonam

Relative Abundance

100%
75%
50%
25%
0%

Enterococcus
Enterococcus
Enterococcus
Enterococcus
Lactobacillus

−7
−2
3
18
24

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 206 (Multiple Myeloma)

Medications

Relative Abundance

100%
75%
50%
25%
0%

Bacteroides
Proteobacteria
Enterococcus
Veillonella

−9
0
4
14

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 209 (Lymphoma)

Medications

Vancomycin
Pentamidine
Aztreonam
Vancomycin
Vancomycin
Pentamidine
Azithromycin
Azithromycin

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Dorea
Other Firmicutes
Streptococcus

−5
−2
10
15

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 210 (Leukemia)

Medications

Zosyn
Vancomycin
Pentamidine
Pentamidine
Linezolid
Imipenem
Daptomycin
Cefepime

Relative Abundance

100%
75%
50%
25%
0%

Enterococcus
Enterococcus
Enterococcus
Enterococcus
Lactococcus
Lactococcus
Enterococcus

−6
−2
8
13
21
27
35

−10
0
10
20
30

Transplant day

Bacteria phylotypes
Enterococcus
Streptococcus
Blautia
Bacteroides
Proteobacteria
Dorea
Lactobacillus
Coprobacillus
Staphylococcus
unclassified_Lachnospiraceae
Roseburia
Coprococcus
Parabacteroides
Lactococcus
Veillonella
Granulicatella
Other Firmicutes
Other Bacteroidetes
Other Bacteria

Patient 211 (Multiple Myeloma)

Medications

Vancomycin

TMP−SMX

Clindamycin

Aztreonam

Pentamidine

Relative Abundance

100%

75%

50%

25%

0%

Bacteroides

Blautia

Bacteroides

Coprobacillus

−8 −4 6 11 17

−10 0 10 20 30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 214 (Leukemia)

Medications

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Enterococcus
Blautia
Enterococcus
Streptococcus
Enterococcus

−5
−3
4
12
18

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 217 (Leukemia)

Medications

Vancomycin
Vancomycin
Vancomycin
TMP−SMX
Pentamidine
Pentamidine
Aztreonam
Aztreonam

Relative Abundance

100%
75%
50%
25%
0%

Streptococcus
Streptococcus
Streptococcus
Streptococcus
Streptococcus

−7
0
4
5
12

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 219 (Lymphoma)

Medications

Zosyn
Vancomycin
TMP−SMX
Pentamidine
Imipenem
Cefepime

Relative Abundance

100%
75%
50%
25%
0%

Proteobacteria
Proteobacteria
Bacteroides
Lactobacillus
Lactococcus

−1
6
16
20

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Lactococcus
- Veillonella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 220 (Lymphoma)

Medications

Zosyn

Vancomycin

Pentamidine

Metronidazole

Relative Abundance

100%

75%

50%

25%

0%

Blautia

Streptococcus

Streptococcus

−7

−1

4

11

19

−10

0

10

20

30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 221 (Myelodysplastic Syndrome)

Medications

Zosyn

Vancomycin

Cefepime

Relative Abundance

100%

75%

50%

25%

0%

Lactobacillus

Other Bacteria

Lactobacillus

Other Firmicutes

−9

−2

4

11

26

−10

0

10

20

30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 222 (Leukemia)

Medications

Zosyn

Vancomycin

Relative Abundance

100%

75%

50%

25%

0%

Blautia

Bacteroides

Proteobacteria

Proteobacteria

−6

−1

0

6

13

20

−10

0

10

20

30

Transplant day

Bacteria phylotypes

Enterococcus

Streptococcus

Blautia

Bacteroides

Proteobacteria

Dorea

Lactobacillus

Coprobacillus

unclassified_Lachnospiraceae

Roseburia

Coprococcus

Parabacteroides

Veillonella

Granulicatella

Other Firmicutes

Other Bacteria

Patient 223 (Leukemia)

Medications

Zosyn

Vancomycin

Pentamidine

Levofloxacin

Augmentin

Augmentin

Relative Abundance

100%

75%

50%

25%

0%

Bacteroides

Enterococcus

Enterococcus

Enterococcus

Enterococcus

Streptococcus

Streptococcus

−5

−1

6

13

20

26

28

−10

0

10

20

30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 224 (Other)

Medications

Zosyn
Vancomycin
Pentamidine
Ciprofloxacin
Pentamidine

Relative Abundance

100%
75%
50%
25%
0%

Bacteroides
Other Firmicutes
Other Bacteria
Streptococcus
Proteobacteria
Blautia

−8
−1
4
11
25
33

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 226 (Leukemia)

Medications

Zosyn
Zosyn
Vancomycin
Vancomycin
Vancomycin
Vancomycin
Pentamidine
Metronidazole
Metronidazole
Linezolid
Daptomycin
Ciprofloxacin

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Enterococcus
Enterococcus
Enterococcus

−9
−3
5
13
18

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 227 (Leukemia)

Medications

Zosyn

Vancomycin

Pentamidine

Ciprofloxacin

Aztreonam

Relative Abundance

100%

75%

50%

25%

0%

unclassified_Lachnospiraceae

Lactobacillus

Enterococcus

−3

4

15

−10

0

10

20

30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 228 (Myelodysplastic Syndrome)

Medications

Zosyn
Zosyn
Vancomycin
Vancomycin
Vancomycin
Vancomycin
Vancomycin
Pentamidine
Metronidazole
Ciprofloxacin
Ciprofloxacin
Ciprofloxacin
Cefepime
Cefepime

Relative Abundance

100%
75%
50%
25%
0%

Dorea
Streptococcus
Dorea
Other Bacteria
Enterococcus

−9
−2
4
18

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 230 (Myelodysplastic Syndrome)

Medications

Vancomycin

Ciprofloxacin

Cefepime

Pentamidine

Relative Abundance

100%

75%

50%

25%

0%

Streptococcus

Other Firmicutes

Lactobacillus

−10

−1

3

11

−10

0

10

20

30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 232 (Leukemia)

Medications

Zosyn
Vancomycin
Vancomycin
Vancomycin
Vancomycin
Pentamidine
Pentamidine
Linezolid
Ciprofloxacin
Ciprofloxacin
Azithromycin

Relative Abundance

100%
75%
50%
25%
0%

Dorea
Dorea
Enterococcus
Enterococcus
Enterococcus
Enterococcus
Enterococcus

−5
−1
4
12
21
24
26

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Coprobacillus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 233 (Myelodysplastic Syndrome)

Medications

Zosyn
Vancomycin
Pentamidine
Ciprofloxacin
Cefazolin

Relative Abundance

100%
75%
50%
25%
0%

−10
7
10

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 234 (Other)

Medications

Vancomycin
Pentamidine
Ciprofloxacin
Cefepime
Azithromycin
Azithromycin
Azithromycin
Azithromycin
Atovaquone

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Streptococcus
Streptococcus
Coprobacillus
Blautia
Blautia
Other Bacteroidetes

−6
−2
0
5
12
14

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 237 (Lymphoma)

Medications

Zosyn

Vancomycin

Atovaquone

Relative Abundance

100%

75%

50%

25%

0%

−2

6

12

Streptococcus

−10

0

10

20

30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 301 (Leukemia)

Medications

Zosyn
Vancomycin
TMP−SMX
Pentamidine
Imipenem
Ciprofloxacin

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Other Bacteria
Staphylococcus
Streptococcus
Staphylococcus
Streptococcus
Staphylococcus

−1
9
15
22
28
35

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 303 (Leukemia)

Medications

Zosyn
Vancomycin
TMP−SMX
Ciprofloxacin
Cefepime
Aztreonam

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Other Firmicutes
Streptococcus
Lactobacillus
Enterococcus

−7
0
8
21
28

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteria

Patient 304 (Leukemia)

Medications

Zosyn
Vancomycin
Vancomycin
TMP−SMX
Pentamidine
Linezolid
Ciprofloxacin
Cefepime
Aztreonam

Relative Abundance

100%
75%
50%
25%
0%

Enterococcus
Dorea
Enterococcus
Enterococcus
Enterococcus

0
8
16
22
29

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteria

Patient 305 (Lymphoma)

Medications

Zosyn
Vancomycin
TMP−SMX
Metronidazole
Metronidazole
Imipenem
Daptomycin
Cefepime
Aztreonam

Relative Abundance

100%
75%
50%
25%
0%

Other Firmicutes
Enterococcus
Streptococcus
Blautia
Streptococcus
Proteobacteria
Proteobacteria
Enterococcus
Proteobacteria

−8 −6 −2 8 14 22 29

−10 0 10 20 30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 306 (Leukemia)

Medications

Zosyn
Vancomycin
TMP−SMX
Metronidazole
Linezolid
Ciprofloxacin
Cefepime
Amikacin
Imip

Relative Abundance

100%
75%
50%
25%
0%

Enterococcus
Enterococcus
Enterococcus

−5
2
9
18

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 307 (Lymphoma)

Medications

TMP−SMX

Levofloxacin

Atovaquone

Atovaquone

Atovaquone

Relative Abundance

100%

75%

50%

25%

0%

Blautia

Blautia

Blautia

Blautia

−6

3

7

14

−10

0

10

20

30

Transplant day

Bacteria phylotypes

Enterococcus

Streptococcus

Blautia

Bacteroides

Proteobacteria

Dorea

Lactobacillus

Coprobacillus

unclassified_Lachnospiraceae

Roseburia

Coprococcus

Parabacteroides

Lactococcus

Veillonella

Granulicatella

Other Firmicutes

Other Bacteria

Patient 308 (Lymphoma)

Medications

Zosyn
Vancomycin
Vancomycin
Vancomycin
TMP−SMX
Metronidazole
Linezolid
Daptomycin
Ciprofloxacin
Atovaquone

Relative Abundance

100%
75%
50%
25%
0%

Streptococcus

−6
11
21

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 309 (Leukemia)

Medications

Zosyn
Vancomycin
TMP−SMX
Zosyn
Vancomycin
TMP−SMX
Zosyn
Vancomycin
Timentin
Penicillin
Penicillin
Levofloxacin
Levofloxa
Ciprofloxacin
Ciprofloxacin
Ciprofloxacin
Cefepime
Augmentin

Relative Abundance

100%
75%
50%
25%
0%

Streptococcus
Streptococcus
Streptococcus
Streptococcus
Lactococcus

−7
0
7
14

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 310 (Lymphoma)

Medications

Zosyn

Vancomycin

TMP−SMX

Ciprofloxacin

Relative Abundance

100%

75%

50%

25%

0%

Other Firmicutes

Other Firmicutes

Blautia

Blautia

Streptococcus

Blautia

−7

0

7

15

21

−10

0

10

20

30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteria

Patient 311 (Other)

Medications

Zosyn
Vancomycin
Vancomycin
Vancomycin
Pentamidine
Imipenem
Ciprofloxacin
Cefepime

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Other Bacteria
Parabacteroides
Parabacteroides
Parabacteroides
Lactobacillus

−8
0
7
18
25
28
35

−10
0
10
20
30

Transplant day

Bacteria phylotypes
Enterococcus
Streptococcus
Blautia
Bacteroides
Proteobacteria
Dorea
Lactobacillus
Coprobacillus
Staphylococcus
unclassified_Lachnospiraceae
Roseburia
Coprococcus
Parabacteroides
Lactococcus
Veillonella
Granulicatella
Other Firmicutes
Other Bacteroidetes
Other Bacteria

Patient 312 (Lymphoma)

Medications

Zosyn
Vancomycin
TMP−SMX
Pentamidine
Imipenem
Ciprofloxacin

Relative Abundance

100%
75%
50%
25%
0%

Other Firmicutes
Lactobacillus
Lactobacillus
Lactobacillus
Streptococcus

0
7
14
21
30
35

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 315 (Lymphoma)

Medications

Zosyn
Vancomycin
TMP−SMX
Levofloxacin

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Enterococcus

−6
2
7

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 316 (Lymphoma)

Medications

Zosyn

TMP−SMX

Metronidazole

Levofloxacin

Relative Abundance

100%

75%

50%

25%

0%

Blautia

Blautia

Streptococcus

Streptococcus

Other Bacteria

−2

0

8

14

−10

0

10

20

30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 317 (Lymphoma)

Medications

Zosyn
Vancomycin
TMP−SMX
Ciprofloxacin
Atovaquone
Atovaquone
Atovaquone

Relative Abundance

100%
75%
50%
25%
0%

Enterococcus
Enterococcus
Other Firmicutes
Other Firmicutes

−1
2
7

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 318 (Leukemia)

Medications

Vancomycin
Vancomycin
TMP−SMX
Tigecycline
Metronidazole
Meropenem
Linezolid
Imipenem
Gentamicin
Daptomycin
Ciprofloxacin
Ciprofloxacin
Cefepime
Aztreonam
Amikacin

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Enterococcus
Enterococcus
Enterococcus

−6
1
8
14

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 319 (Lymphoma)

Medications

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Blautia
Blautia
Streptococcus

−4
9
15

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Lactococcus
- Other Firmicutes
- Other Bacteria

Patient 320 (Lymphoma)

Medications

Zosyn
Vancomycin
Vancomycin
Vancomycin
TMP−SMX
Pentamidine
Meropenem
Ciprofloxacin

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Coprobacillus
Staphylococcus
Other Firmicutes
Streptococcus
Staphylococcus

−1
7
18
21
29

−10
0
10
20
30

Transplant day

Bacteria phylotypes

- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- Staphylococcus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Lactococcus
- Veillonella
- Granulicatella
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria

Patient 321 (Lymphoma)

Medications

Zosyn
Vancomycin
Vancomycin
Vancomycin
TMP−SMX
Pentamidine
Linezolid
Linezolid
Imipenem
Imipenem
Ciprofloxacin
Cefepime
Aztreonam
Aztreonam

Relative Abundance

100%
75%
50%
25%
0%

Blautia
Enterococcus
Proteobacteria
Enterococcus
Enterococcus
Enterococcus

−8
0
7
14
34

−10
0
10
20
30

Transplant day

Bacteria phylotypes
- Enterococcus
- Streptococcus
- Blautia
- Bacteroides
- Proteobacteria
- Dorea
- Lactobacillus
- Coprobacillus
- unclassified_Lachnospiraceae
- Roseburia
- Coprococcus
- Parabacteroides
- Other Firmicutes
- Other Bacteroidetes
- Other Bacteria