

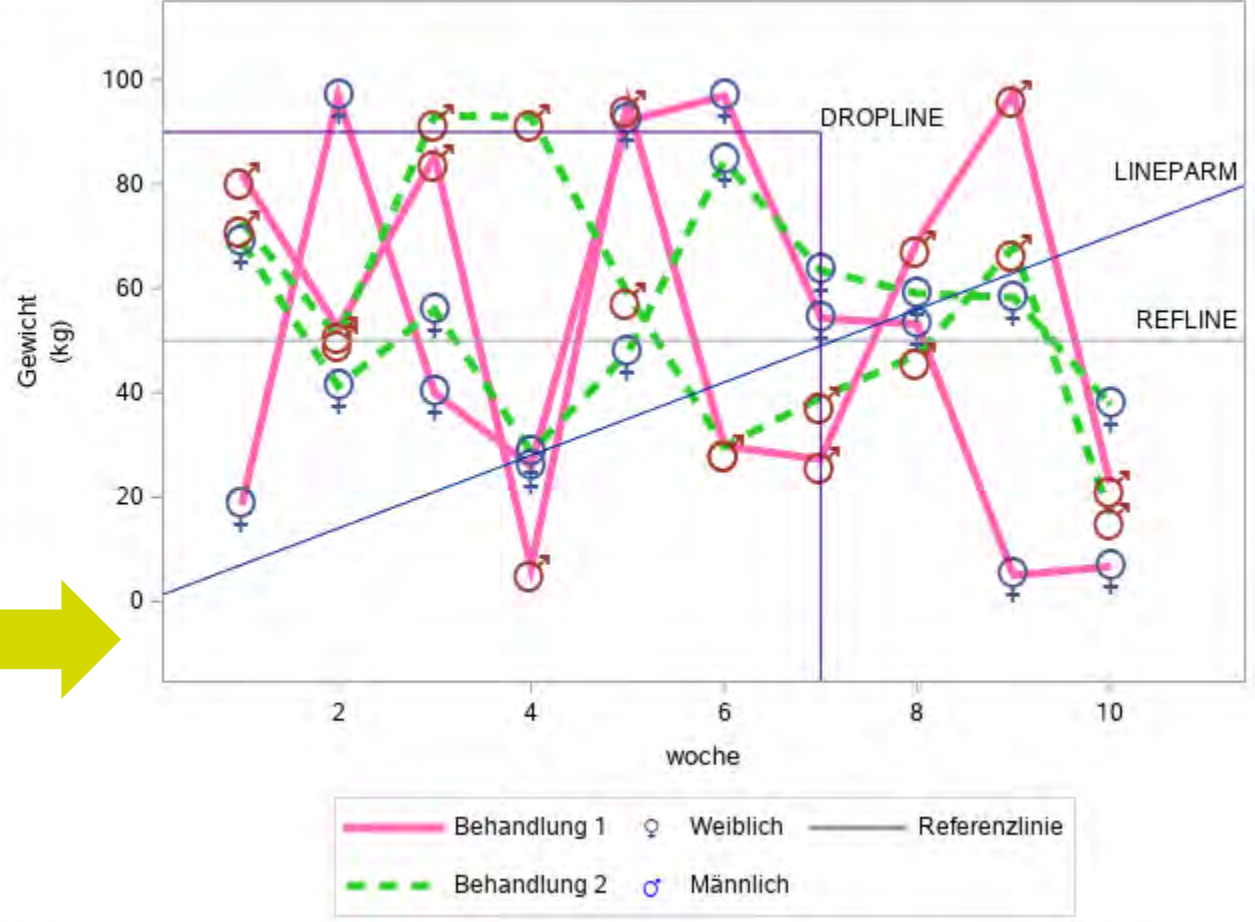
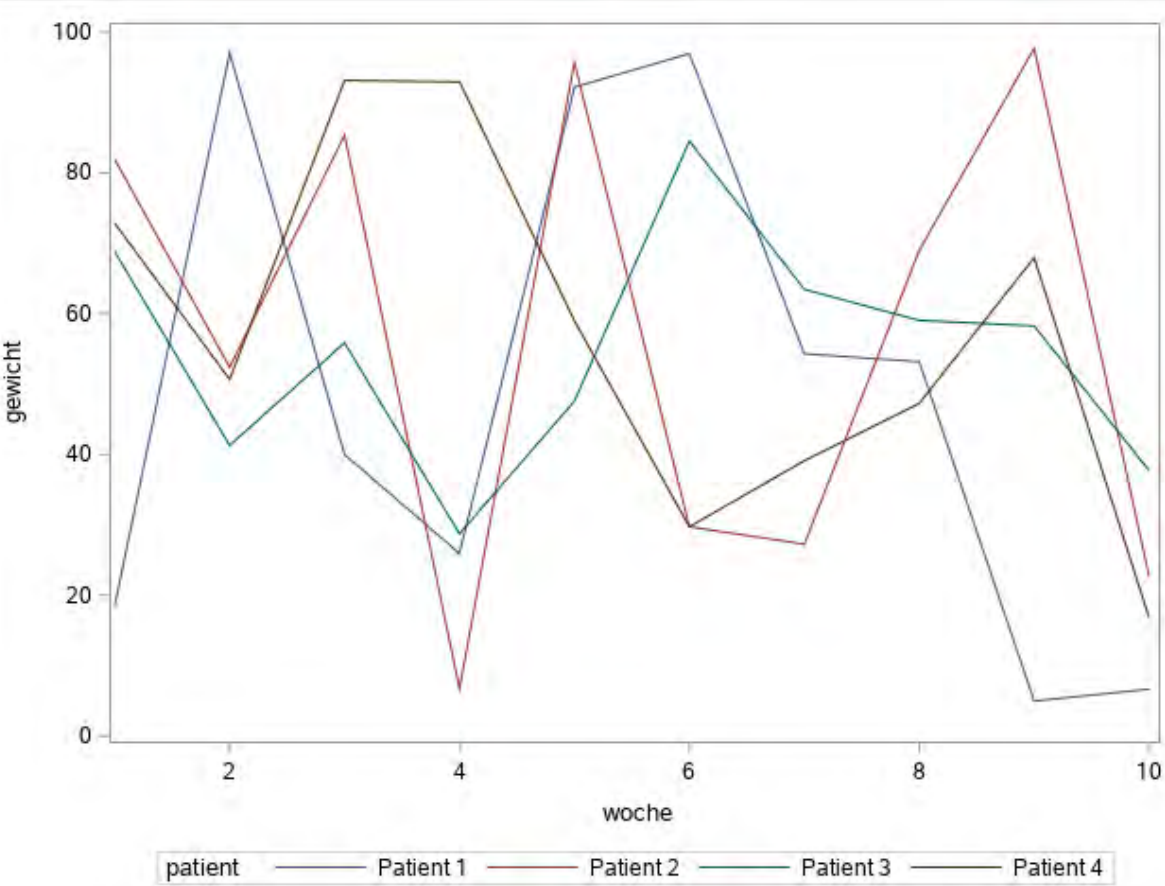
A decorative graphic on the left side of the slide consists of several overlapping geometric shapes. There is a large yellow shape that looks like a stylized 'L' or a thick line. Overlapping it are two dark grey shapes: one is a rounded rectangle at the top, and the other is a larger rounded shape at the bottom.

SGPLOT – Tipps und Tricks

Stefan Beimel

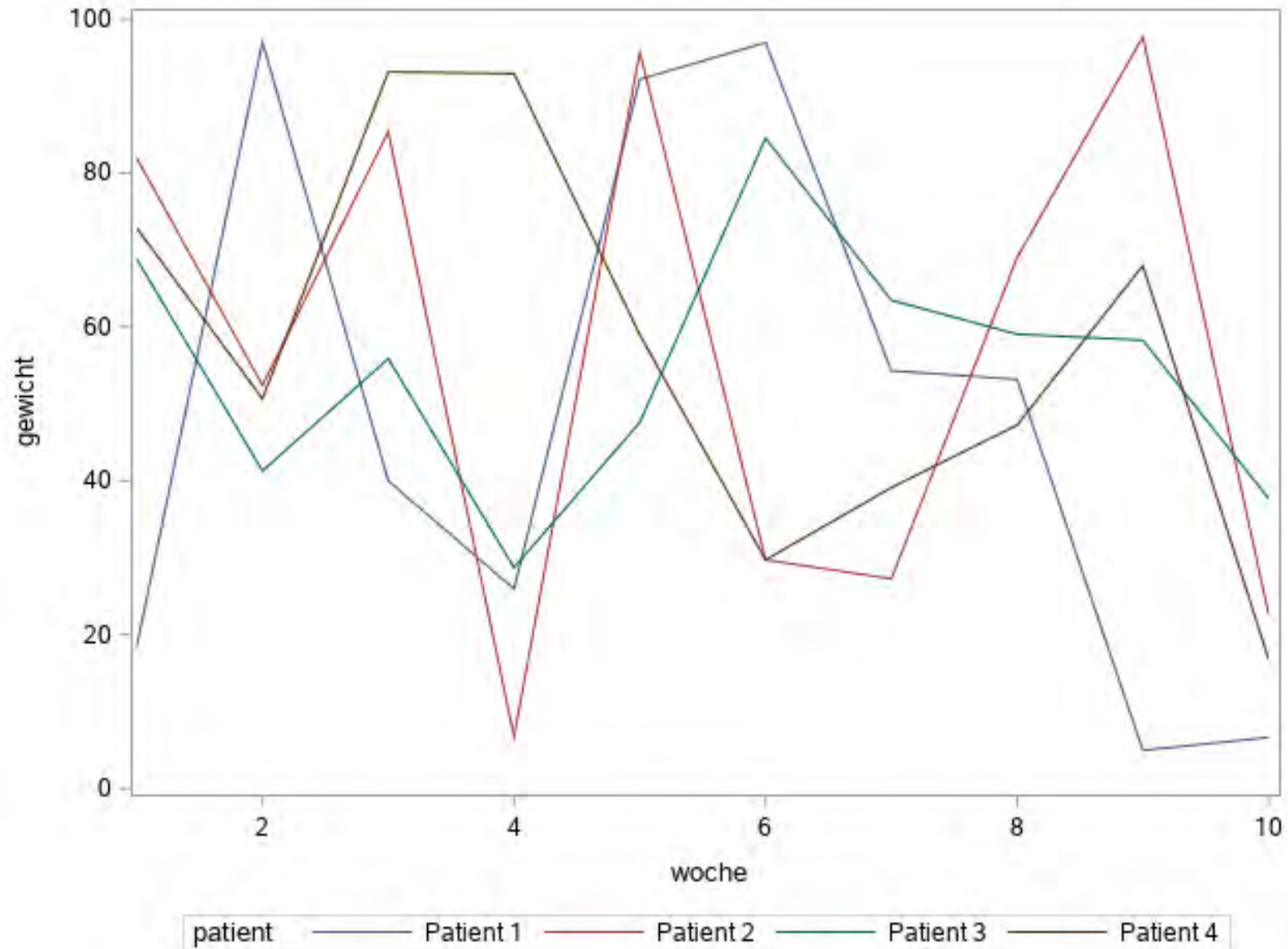
15-September-2022

Agenda



Das Original

```
proc sgplot data=gewicht;  
  series x=woche y=gewicht/  
  group=patient;  
run;
```



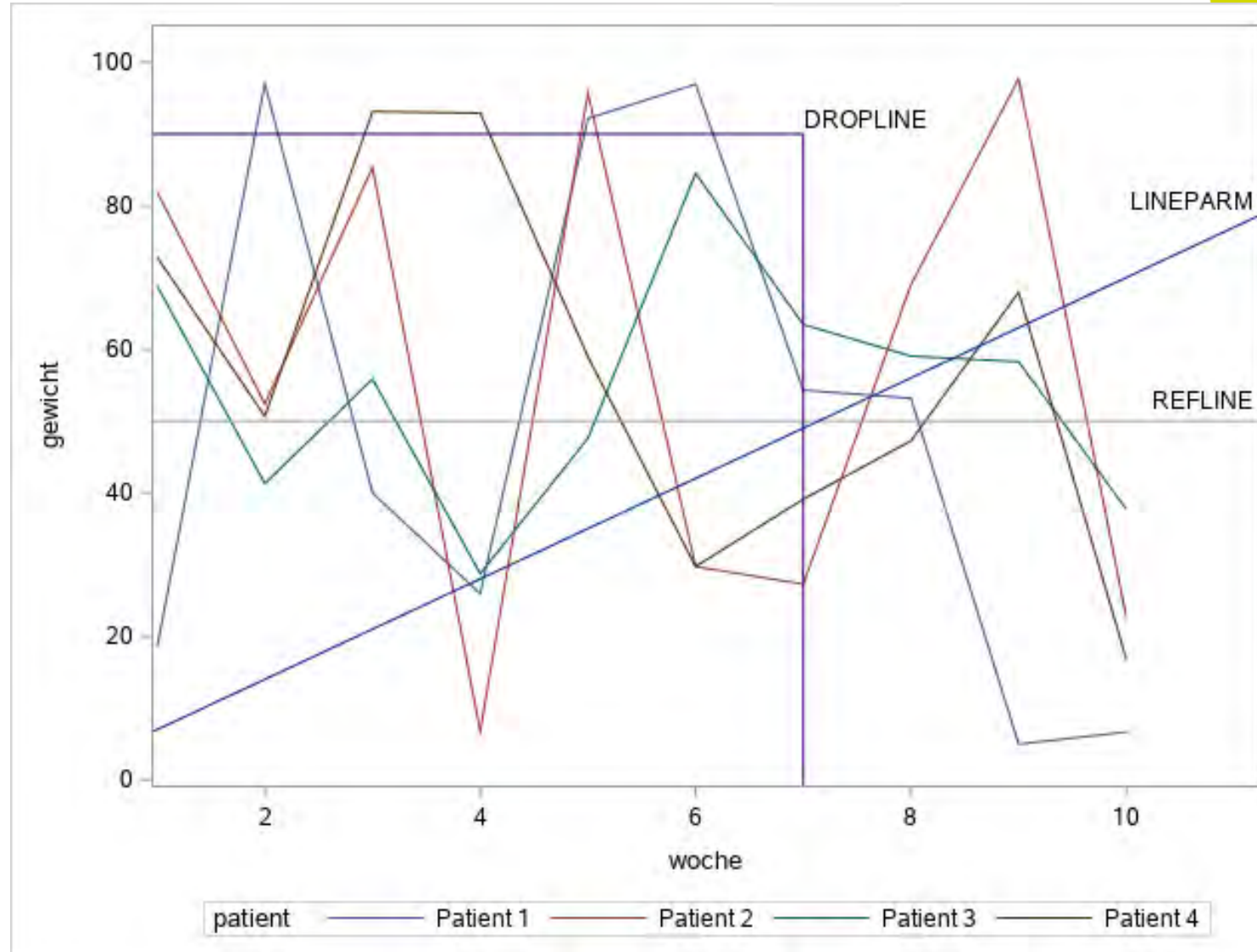
REFLINE / DROPLINE / LINEPARM

```
refline 50 / label='REFLINE' labelloc=inside;
```







```
dropline x=7 y=90 / label='DROPLINE' dropto=both lineattrs=(color=indigo);
```

```
lineparm x=0 y=0 slope=7
```

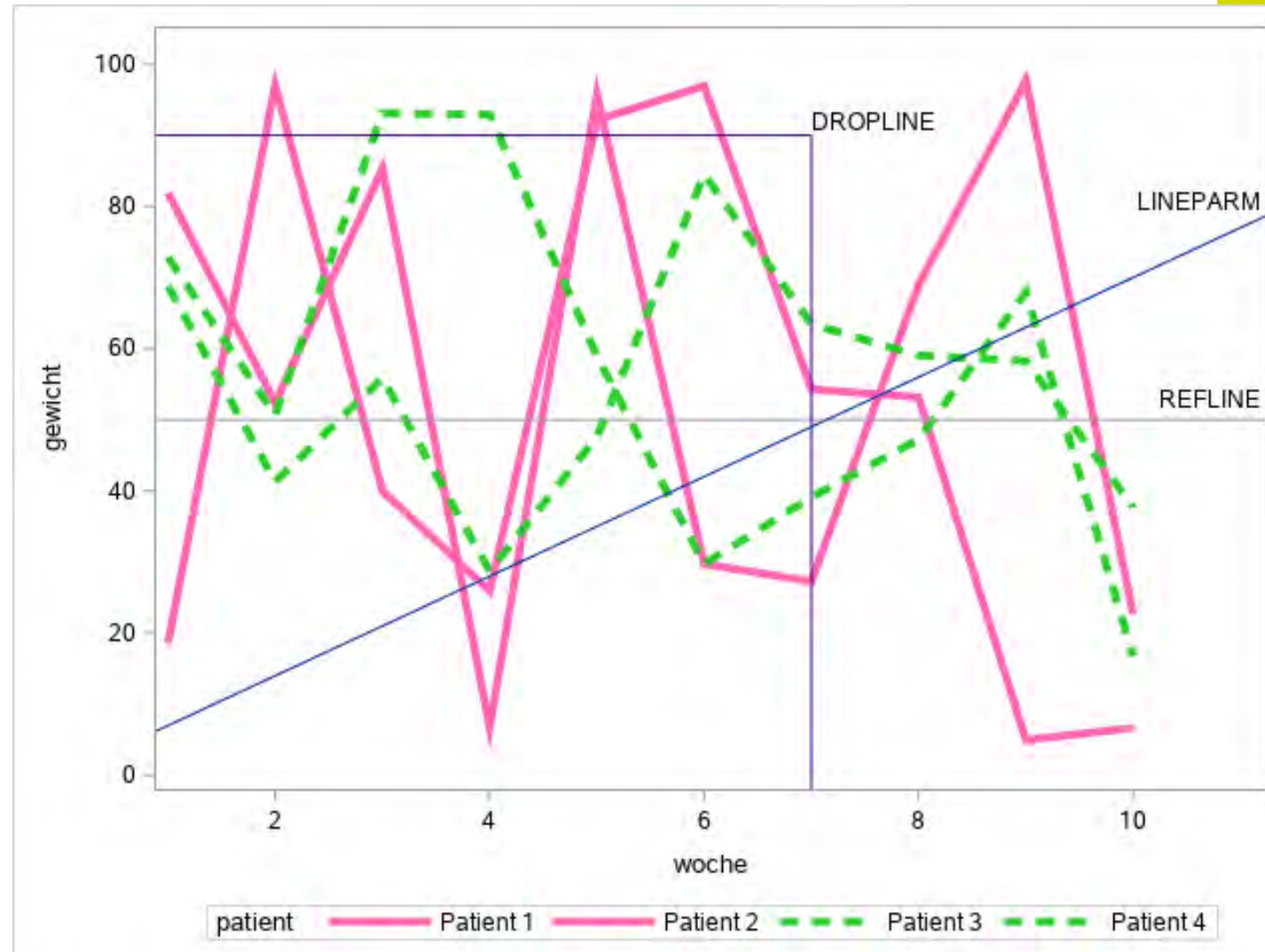
```
 / curvelabel="LINEPARM" clip;
```



DATTRMAP - *discrete-attribute-map-data-set*

	 id	 value	 linecolor	 linepattern	 markersymbol	 markercolor
1	BehID	Behandlung 1	hotpink	solid		
2	BehID	Behandlung 2	limegreen	dash		

```
proc sgplot data=gewicht
  datrmap=datrmap;
  series x=woche y=gewicht
  /group=patient
  grouplc=behandlung lcatrid=BehID
  grouplp=behandlung lpattrid=BehID
  lineattrs=(thickness=4);
```

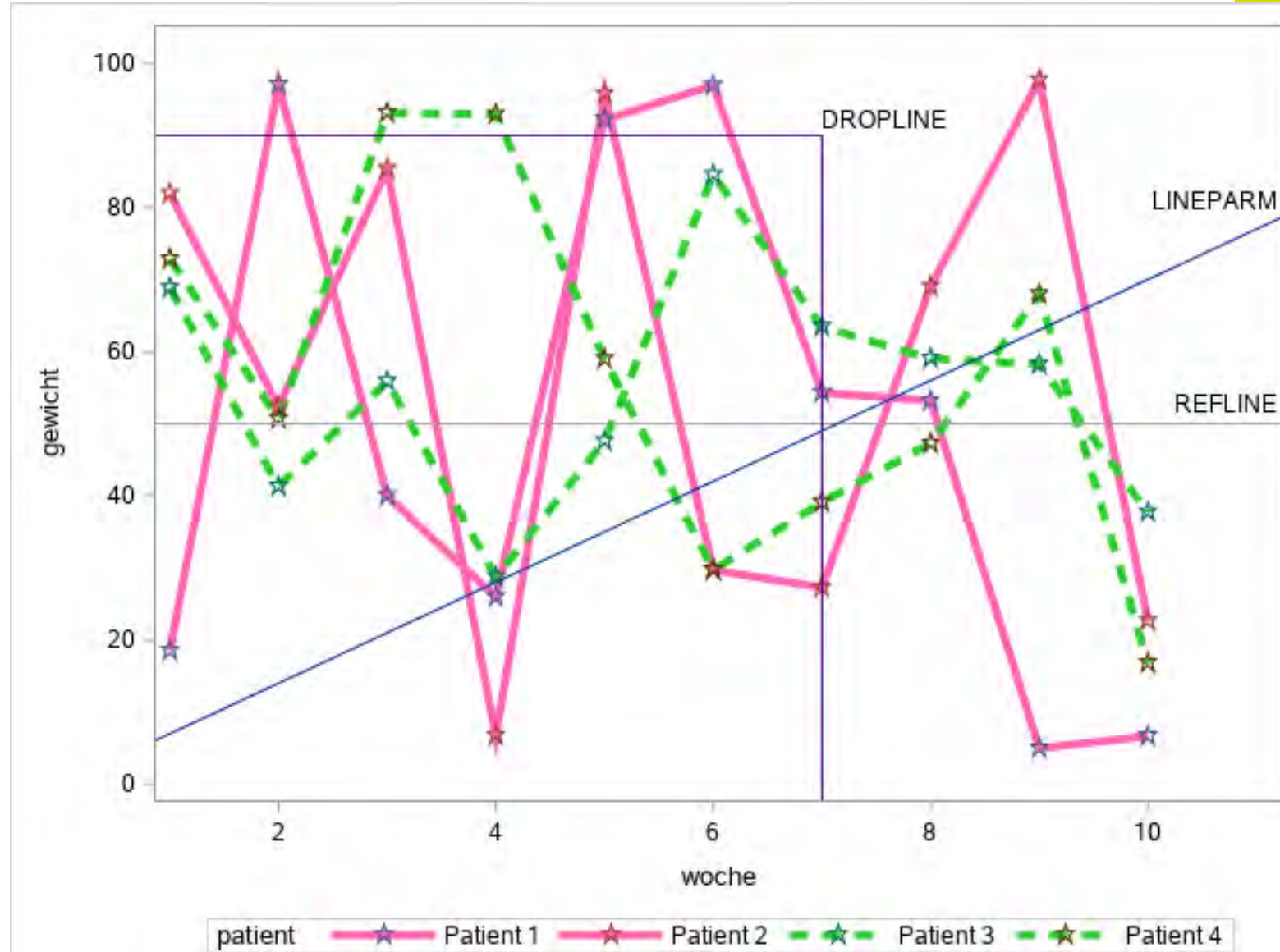


SYMBOLCHAR – Marker anschalten







`series x=woche y=gewicht/... markers markerattrs=(symbol=star)`

Supported Marker Symbols

Symbol Name	Plot Symbol	Symbol Name	Plot Symbol
ArrowDown	↓	StarFilled	★
Asterisk	✱	Tack	⋮
Circle	○	Tilde	∩
CircleFilled	●	Triangle	△
Diamond	◇	TriangleFilled	▲
DiamondFilled	◆	TriangleDown	▽
GreaterThan	>	TriangleDownFilled	▼
Hash	#	TriangleLeft	◁
HomeDown	⏚	TriangleLeftFilled	◄
HomeDownFilled	◼	TriangleRight	▷
IBeam	⏏	TriangleRightFilled	►
LessThan	<	Union	∪
Plus	+	X	×
Square	□	Y	Υ
SquareFilled	■	Z	Ζ
Star	☆		



SYMBOLCHAR – mit DATTRMAP

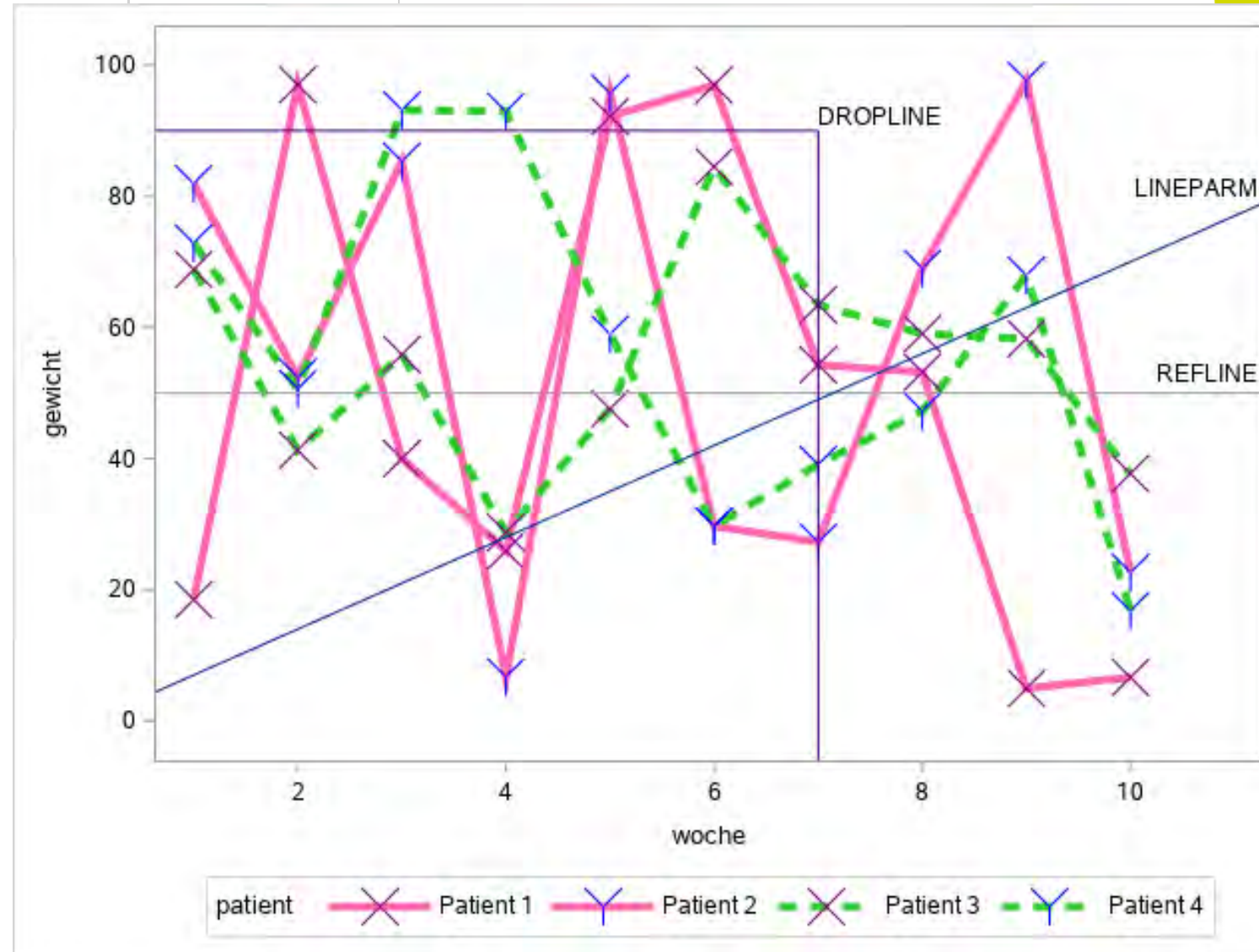
	 id	 value	 linecolor	 linepattern	 markersymbol	 markercolor
1	SexID	female			X	purple
2	SexID	male			Y	blue

`series x=woche y=gewicht/...`

























`groupms=sex msattrid=SexID`

`groupmc=sex mcattrid=SexID`

`markerattrs=(size=20)`









SYMBOLCHAR – mit Unicode

	260	261	262	263	264	265	266	267
0	 2600	 2610	 2620	 2630	 2640	 2650	 2660	 2670
1	 2601	 2611	 2621	 2631	 2641	 2651	 2661	 2671
2	 2602	 2612	 2622	 2632	 2642	 2652	 2662	 2672

🔍 unicode female

```
symbolchar name=weiblich char='2640'x;
```

```
symbolchar name=männlich char='2642'x;
```

	 id	 value	 linecolor	 linepattern	 markersymbol	 markercolor
1	SexID	female			X	purple
2	SexID	male			Y	blue
3	SexID2	female			weiblich	purple
4	SexID2	male			männlich	blue


```
proc sgplot data=gewicht datrmap=datrmap;
```

```
symbolchar name=weiblich char='2640'x ;
```

```
symbolchar name=männlich char='2642'x ;
```

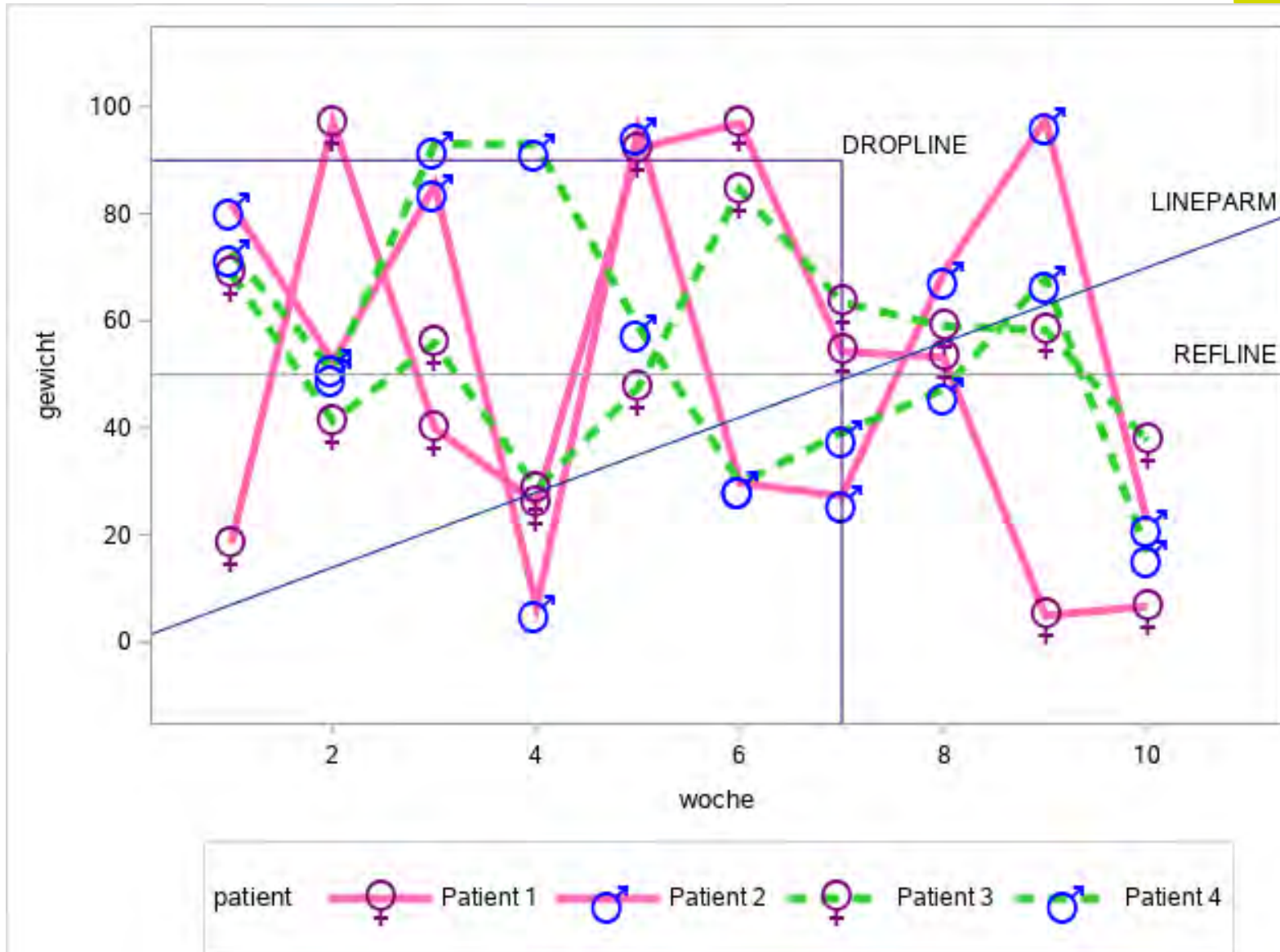
```
series x=woche y=gewicht/...
```

```
groupms=sex msattrid=SexID2
```

```
groupmc=sex mcattrid=SexID2
```

```
markerattrs=(size=40) ;
```

SYMBOLCHAR



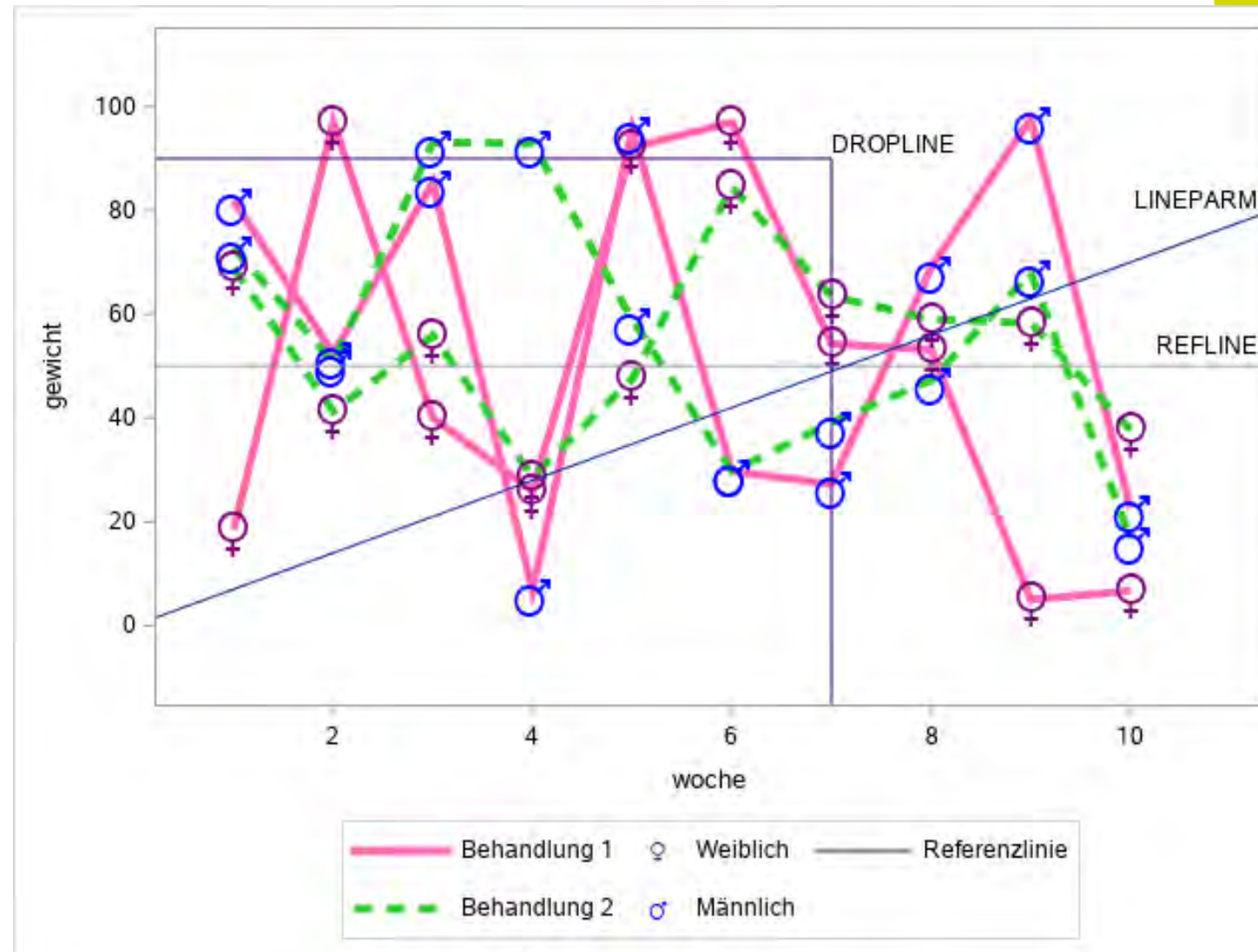
LEGENDITEM

```
legenditem type=line name="B1" / label="Behandlung 1"  
lineattrs=(color=hotpink pattern=solid thickness=4);
```

```
legenditem type=marker name="F" / label="Weiblich"  
markerattrs=(color=purple symbol=weiblich size=20) ;
```

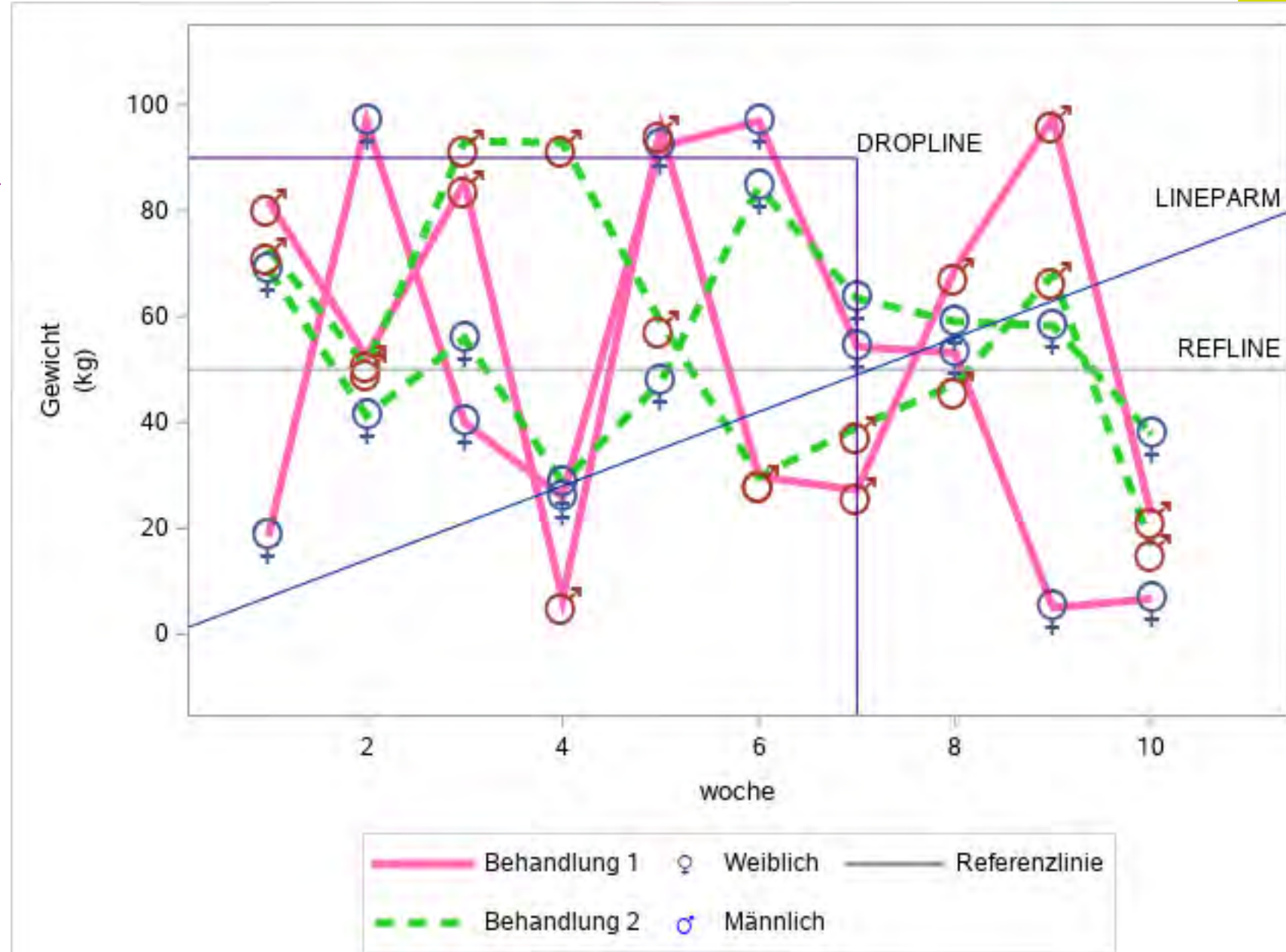
```
legenditem type=line name="R" /  
lineattrs=(...)  
label="Referenzlinie";
```

```
keylegend "B1" "F" "R"  
"B2" "M" /across=3;
```



Kontrollierter Zeilenumbruch in der Achsenbeschriftung

```
yaxis label=  
"Gewicht  
(*ESC*){unicode '000a'x}  
(kg)";
```



Das war ...

- › REFLINE/ DROPLINE/ LINEPARM
- › DATTRMAP (Attribute nach Ausprägung in den Daten setzen)
- › SYMBOLCHAR
- › LEGENDITEM (Legenden frei gestalten)
- › Zeilenumbrüche mit (*ESC*)

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 - PROC SGPLOT Statement
 - STYLEATTRS Statement
 - BAND Statement
 - BLOCK Statement
 - BUBBLE Statement
 - DENSITY Statement
 - DOT Statement

SAS ODS Graphics: Procedures Guide

Syntax

```
PROC SGPLOT <options>;  
  STYLEATTRS </options>  
  BAND X=variable Y=variable  
    UPPER= numeric-value | numeric-variable  
    LOWER= numeric-value | numeric-variable </options>;  
  BLOCK X=category-variable BLOCK=block-variable </options>;  
  BUBBLE X=variable Y=variable SIZE=numeric-variable </options>;  
  DENSITY response-variable </options>;  
  DOT category-variable </options>;  
  DROPLINE X=variable x-axis-value  
    Y=variable | y-axis-value </options>;  
  ELLIPSE X=numeric-variable Y=numeric-variable </options>;  
  ELLIPSEPARM SEMIMAJOR= numeric-value | numeric-variable  
    SEMIMINOR= numeric-value | numeric-variable </options>;  
  FRINGE numeric-variable </options>;  
  GRADLEGEND <"name"> </options>;  
  HBAR category-variable </options>;  
  HBARBASIC category-variable </options>;  
  HBARPARM CATEGORY= category-variable RESPONSE= numeric-variable </options>;  
  HBOX analysis-variable </options>;  
  HEATMAP X=variable Y=variable </options>;  
  HEATMAPPARM X=variable Y=variable  
    COLORGROUP=variable | COLORRESPONSE=numeric-variable </options>;
```

Hilfe

➤ <https://support.sas.com/>

Search SAS Support

sgplot

Search



Thank you