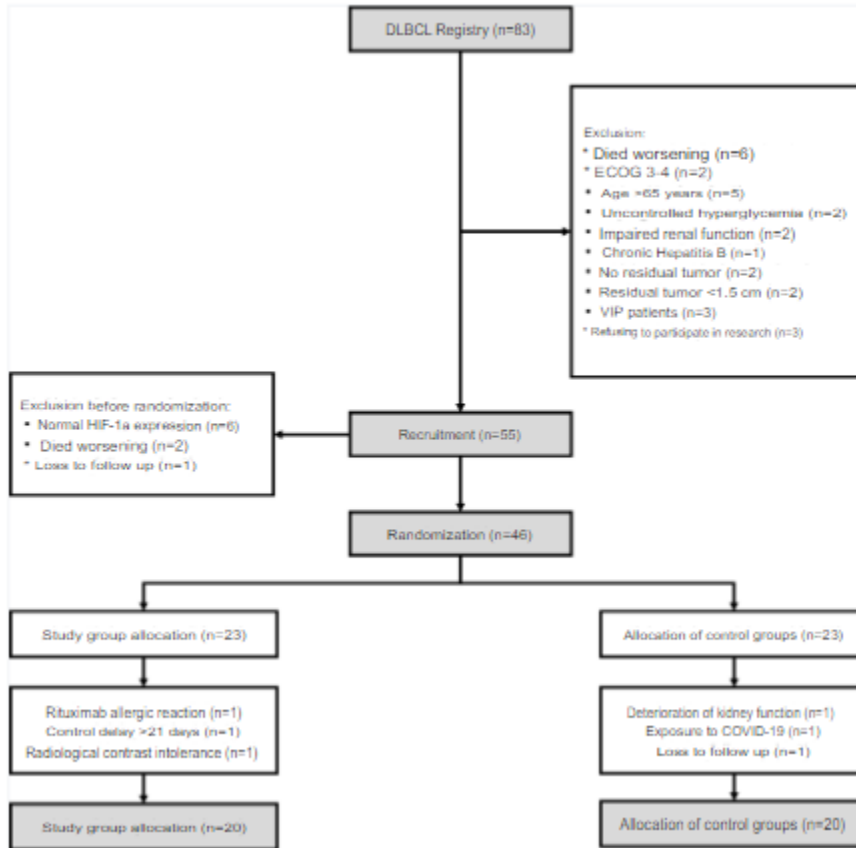


Participant Flow



Baseline Characteristics

Variable	Study Group		p
	Intervention (n=20)	Control (n=20)	
Age (Years)	55,0 (24-65)	60 (18-65)	0,211*
Gender			0,500 [†]
Male (n, %)	11 (55%)	12 (60%)	
Female (n, %)	9 (45%)	8 (40%)	
BMI (kg/m²)	21,5 (15,79-39,54)	20,84 (16,1-32,89)	0,547*
BSA (/m²)	1,54 (1,34-1,93)	1,55 (1,36-1,95)	0,657 [†]
ECOG			0,667*
0-1	17 (85%)	16 (80%)	
2	3 (15%)	4 (20%)	
B Symptoms			1 [†]
Yes (n, %)	17 (85%)	17 (85%)	
No (n, %)	3 (15%)	3 (15%)	

Variable	Study Group		p
	Intervention (n=20)	Control (n=20)	
Subtype			
GCB (n, %)	4 (20%)	7 (35%)	0,480 [†]
Non-GCB (n, %)	16 (80%)	13 (65%)	
Stadium			
1 (n, %)	1 (5%)	2 (10%)	0,183*
2 (n, %)	13 (65%)	8 (40%)	
3 (n, %)	4 (20%)	2 (10%)	
4 (n, %)	2 (10%)	8 (40%)	
Bulky Disease			
Yes (n, %)	12 (60%)	11 (55%)	0,500 [†]
No (n, %)	8 (40%)	9 (45%)	
Ekstranodal			
Yes (n, %)	9 (45%)	12 (60%)	0,527 [†]
No (n, %)	11 (55%)	8 (40%)	
Primary Ekstranodal			
Yes (n, %)	6 (30%)	6 (30%)	1,000 [†]
No (n, %)	14 (70%)	14 (70%)	
NCCN IPI Score			
Low – Low Intermediate (n, %)	9 (45%)	5 (25%)	0,320 [†]
High intermediate – High (n, %)	11 (55%)	15 (75%)	
Ekspresi BCL2			
>50% (n, %)	15 (75%)	19 (95%)	0,182 [†]
<50% (n, %)	5 (25%)	1 (5%)	
Ekspresi Myc			
>50% (n, %)	6 (30%)	11 (55%)	0,200 [†]
<50% (n, %)	14 (70%)	9 (45%)	
Dobel Ekspresi			
Yes (n, %)	1 (5%)	11 (55%)	0,001 [†]
No (n, %)	19 (95%)	9 (45%)	
Hemoglobin (g/dL)	11,95 (10.0-15.60)	11,85 (10,10-14,90)	0,678*
LDH	842 (368-1.722)	809 (416-1.928)	0,799*

Outcome Measurements

Table 1. Response to the Administration of Carbogen-Nicotinamide on Tumor Volume in Each Research Group.

Tumor Volume cm ³	Intervention (n=20)	Control (n=20)	P
	Median, min-max	Median, min-max	
Pre-test,	63,82 (0,36-1.417)	97,03 (3,65-1.258)	0,583*
Post-test	8,31 (0,07-697,61)	67,27 (1,14-1.436)	0,256*

<i>P</i>	<0,001 [†]	0,064 [†]	
ΔVolume Tumor (%)	66,58 (8,79-98,64)	31,23 (-566,67-91,86)	0,042*

Table 2. Response to the Administration of Carbogen-Nicotinamide on Serum HIF-1α in Each Research Group.

Level HIF-1α Serum (pg/mL) (min-max)	Intervention (n=20)	Control (n=20)	<i>P</i>
	Median, min-max	Median, min-max	
Pre-test	49,96 (1,98-281,80)	44,16 (20,83-189,70)	0,495*
Post-test	42,46 (6,57-187,20)	42,46 (20,83-30,60)	0,478*
<i>p</i> (Wilcoxon post-pre)	0,007 [†]	0,446 [†]	
ΔHIF-1α	14,88 (-15,90-186,23)	-1,65 (-68,94-61,19)	0,011*

Table 3. Response to Inhalation of Carbogen-Nicotinamide on Serum VEGF in Each Research Group.

Level VEGF Serum (pg/mL) (min-max)	Intervention (n=20)	Control (n=20)	<i>P</i>
	Median, min-max	Median, min-max	
Pre-test	74,46 (7,70-417,70)	62,62 (3,32-565,40)	0,62*
Post-test	43,67 (9,22-238,70)	84,66 (4,55-241,40)	0,24*
<i>p</i> (Wilcoxon post-pre)	0,03 [†]	0,95 [†]	
ΔVEGF	20,14 (-55,90-179,00)	-1,19 (-111,84-324,00)	0,174*

Table 4. Response to Inhalation of Carbogen-Nicotinamide on Serum MiR-210.

ΔCT miR-210 Serum	Intervention (n=20)	Control (n=20)	<i>P</i>
	Median, min-max	Median, min-max	
Pre-test	7,97 (4,06-11,22)	7,94 (3,13-11,10)	0,79*
Post-test	8,65 (3,90-12,22)	8,69 (0,67-11,21)	0,81*
Upregulated	6 (30%)	8 (40%)	0,74 [†]
Downregulated	14 (70%)	12 (60%)	

*Mann Whitney Test; [†]Chi-square Test

Table 5. Response to therapy in the Region of Interest in each group.

Group	Therapy Response		<i>p</i>
	Response PR+CR, n=27	Not Response SD+PD, n=13	

Intervention	17 (85%)		3 (15%)		0,041*
Control	10 (50%)		10 (50%)		RR=1,70 (1,05-2,73)
	CR	PR	SD	PD	
Intervention	2 (10%)	15 (75%)	3 (15%)	0 (0%)	0,012 [†]
Control	0 (0%)	10 (50%)	9 (45%)	1 (5%)	

CR; complete response PR; partial response; SD; stable disease, PD; progressive disease, ,.

Adverse effects

There were no adverse events associated with this study