

## Introducción :

- Impulsivity is currently accepted as a fact in the diagnosis of the eating disorder bulimia.
- This impulsivity modulates the eating disorder symptoms' evolution and the prognosis. It is a remarkable clinical fact that impulsivity decreases as the eating disorder symptoms improve, yet there aren't any studies where this decrease is considered. Furthermore, this decrease runs parallel with the other symptoms of the bulimic diagnosis. It is also proven that thanks to different pharmacologic treatments which act on impulsivity, there is also a decrease in other bulimic symptoms.
- In studying the implication of impulsivity in Bulimia, we have analysed the evolution of impulsivity and the bulimic diagnosis in patients who fulfil bulimia nervosa criteria and atypical bulimia nervosa according to DSM-IV. We have compared these results to a control group.
- In order to do this, a sample of forty-two patients undergoing treatment in a specialized hospital unit were used. Each diagnosticated according to DSM-IV criteria for BN and EDNOS (with bulimic features) and a control group.

## Method:

- We took a sample of 120 subjects broken down into four groups:
  - 30 hospitalized Bulimia Nervosa subjects treated with CBT
  - 30 hospitalized Bulimia Nervosa subjects treated with CBT plus Topiramate
  - 30 outpatients Bulimia Nervosa subjects treated with Topiramate
  - 30 non-clinical subjects as a control group
- All subjects tested with a BARRAT Impulsivity Scale. We evaluated each group at the beginning of the study and then six months later

## Conclusion:

- The results obtained confirm the multiple-treatment programs, which combine psychotherapy with pharmacological intervention, are the most effective
- The topiramate has proven effective, especially for the non-planned impulsivity control. And it facilitates the psychotherapeutic treatment of cognitive processes.
- Other studies have verified (Grau A., Sánchez, M et al., 2006) high non-planned impulsivity levels predicted a greater drop-out rate. Therefore, topiramate can be a protective agent against the elevated drop-out rates of eating disorders treatments

## Contact:

www.itacat.com  
E.mail: mspovedano@itacat.com

## Results:

### Results 1 Psychotherapy vs Topiramate

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
BARRAT 6 Months – Cognitive Impulsivity	Equal variances assumed.	.000	.992	-4.085	64	.000	-4.80502	1.17623	-7.15491	-2.45523
	Equal Variances not assumed			-4.079	58,041	.000	-4.80502	1.17785	-7.16270	-2.44734
BARRAT 6 Months – Motor Impulsivity	Equal variances assumed.	5.559	.021	.069	64	.945	.07529	1.08629	-2.09483	2.24541
	Equal Variances not assumed			.064	38,978	.949	.07529	1.17987	-2.31127	2.46185
BARRAT 6 Months – Non planned impulsivity	Equal Variances assumed	2.990	.089	3.593	64	.001	3.81564	1.06188	1.69429	5.93698
	Equal Variances not assumed			3.364	42,591	.002	3.81564	1.13432	1.52743	6.10384
BARRAT 6 Months - Total	Equal Variances not assumed	.207	.650	-5.09	64	.612	-1.18436	2.32460	-5.82829	3.45957
	Equal Variances not assumed			-4.88	47,767	.628	-1.18436	2.42942	-6.06955	3.70092

- Psychotherapy is significantly more effective than Topiramate on the Cognitive Impulsivity sub-scale
- No differences have been observed on the Motor Impulsivity sub-scale
- Topiramate is more effective than psychotherapy on the non-planned Impulsivity sub-scale
- On the total sub-scale, no differences have been observed

	Group	N	Mean	Std Deviation	Std. Error Mean
BARRAT 6 Months – Cognitive Impulsivity	Psychotherapy	31	12,3571	4,74704	.89711
	Topiramate	30	17,1622	4,70488	.76323
BARRAT 6 Months – Motor Impulsivity	Psychotherapy	31	12,6429	5,64515	1,06683
	Topiramate	30	12,5676	3,10658	.50395
BARRAT 6 Months – Non planned impulsivity	Psychotherapy	31	19,4643	5,27385	.99666
	Topiramate	30	15,6486	3,33869	.54161
BARRAT 6 Months - Total	Psychotherapy	31	44,4643	10,83028	2,04673
	Topiramate	30	45,6486	8,06801	1,30880

### Results 2 Psychotherapy vs Psychotherapy plus Topiramate

	Group	N	Mean	Std Deviation	Std. Error Mean
BARRAT 6 Months – Cognitive Impulsivity	Psychotherapy	31	12,3571	4,74704	.89711
	Psychotherapy+topiramate	30	9,2545	4,55915	.61476
BARRAT 6 Months – Motor Impulsivity	psychotherapy	31	12,6429	5,64515	1,06683
	Psychotherapy+topiramate	30	9,7636	4,54591	.61297
BARRAT 6 Months – Non planned impulsivity	psychotherapy	31	19,4643	5,27385	.99666
	Psychotherapy+topiramate	30	13,1455	7,64591	1,03097
BARRAT 6 Months - Total	psychotherapy	31	44,4643	10,83028	2,04673
	Psychotherapy+topiramate	30	32,8182	13,66543	1,84265

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
BARRAT 6 Months – Cognitive Impulsivity	Equal variances assumed.	.083	.774	2.891	81	.005	3.10260	1.07317	.96733	5.23787
	Equal Variances not assumed			2.853	52,521	.006	3.10260	1.08753	.92082	5.28437
BARRAT 6 Months – Motor Impulsivity	Equal variances assumed.	.812	.370	2.511	81	.014	2.87922	1.14675	.59755	5.16089
	Equal Variances not assumed			2.340	45,301	.024	2.87922	1.23039	.40154	5.35690
BARRAT 6 Months – Non planned impulsivity	Equal Variances assumed	15,751	.000	3.919	81	.000	6.31883	1.61251	3.11044	9.52722
	Equal Variances not assumed			4.407	73,575	.000	6.31883	1.43396	3.46133	9.17634
BARRAT 6 Months - Total	Equal Variances not assumed	5,835	.018	3.922	81	.000	11.64610	2.98936	5.73801	17.55420
	Equal Variances not assumed			4.229	66,622	.000	11.64610	2.75399	6.14855	17.14366

- The combination of psychotherapy with Topiramate pharmacological treatment is significantly superior on every scales than the isolated psychotherapy treatment

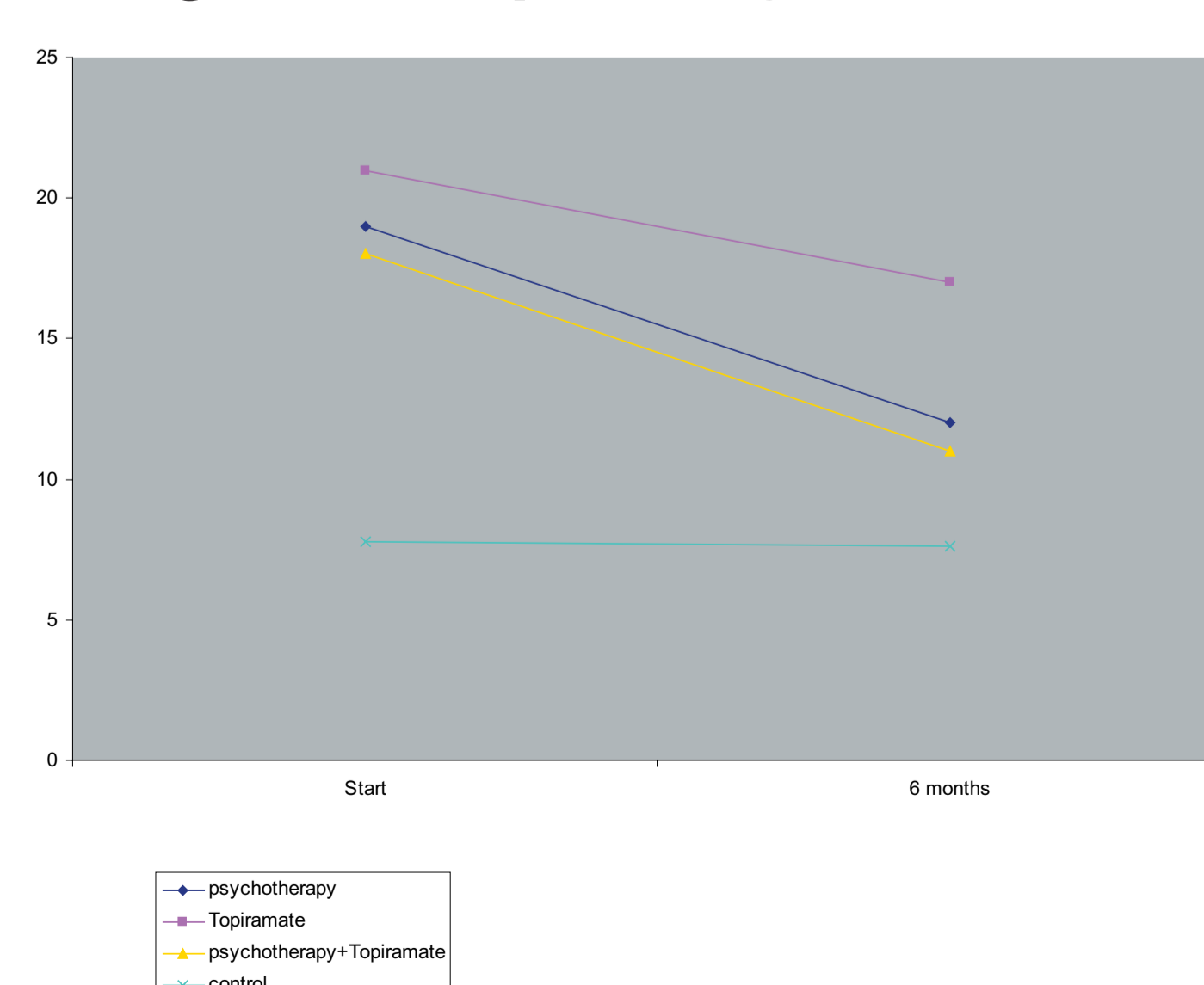
### Results 3 Topiramate vs Psychotherapy

	Group	N	Mean	Std Deviation	Std. Error Mean
BARRAT 6 Months – Cognitive Impulsivity	Topiramate	31	12,3571	4,74704	.89711
	Psychotherapy+Topiramate	30	9,2545	4,55915	.61476
BARRAT 6 Months – Motor Impulsivity	Topiramate	31	12,6429	5,64515	1,06683
	Psychotherapy+Topiramate	30	9,7636	4,54591	.61297
BARRAT 6 Months – Non planned impulsivity	Topiramate	31	19,4643	5,27385	.99666
	Psychotherapy+Topiramate	30	13,1455	7,64591	1,03097
BARRAT 6 Months - Total	Topiramate	31	44,4643	10,83028	2,04673
	Psychotherapy+Topiramate	30	32,8182	13,66543	1,84265

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
BARRAT 6 months- Cognitive Impulsivity	Equal variances assumed.	.110	.741	8.116	91	.000	7.90762	.97434	5.97220	9.84303
	Equal Variances not assumed			8.069	78,068	.000	7.90762	.98002	5.96857	9.85867
Barrat 6 months – Motor Impulsivity	Equal variances assumed.	3,342	.071	3,304	91	.001	2,80393	.84869	1,11811	4,48975
	Equal Variances not assumed			3,533	90,996	.001	2,80393	.79354	1,22766	4,38020
Barrat 6 months Non planned impulsivity	Equal Variances assumed	52,964	.000	1,805	91	.061	2,50319	1,32110	-1,12102	5,12741
	Equal Variances not assumed			2,149	79,123	.035	2,50319	1,16458	.18521	4,82118
Barrat a los 6 meses – Total impulsivity	Equal Variances not assumed	13,294	.000	5,191	91	.000	12,83047	2,47158	7,92088	17,73995
	Equal Variances not assumed			5,677	89,124	.000	12,83047	2,26016	8,33967	17,32127

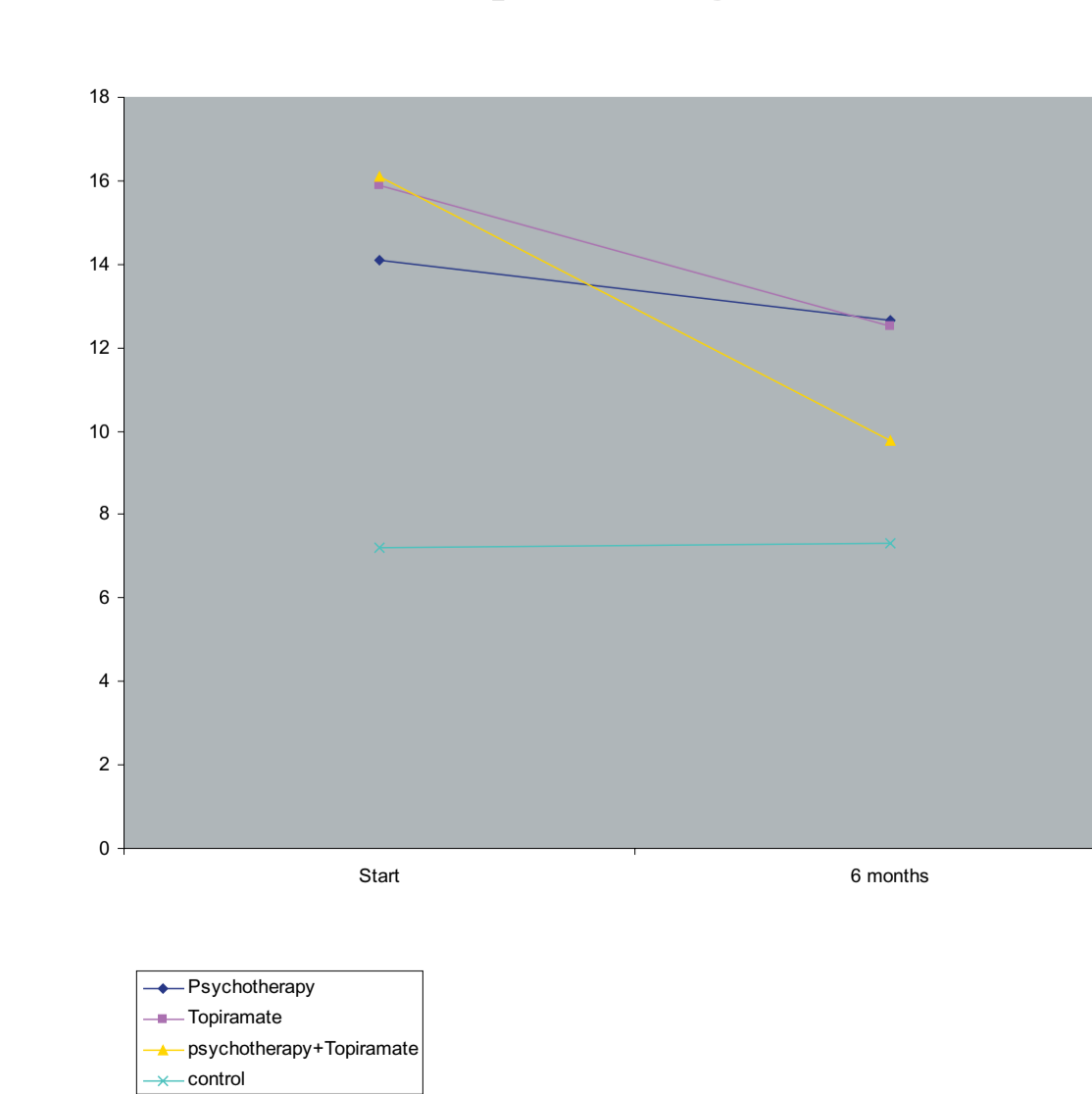
- The combination of psychotherapy with Topiramate pharmacological treatment is significantly superior on every scale than Topiramate as the only treatment

### Results 4 Cognitive Impulsivity



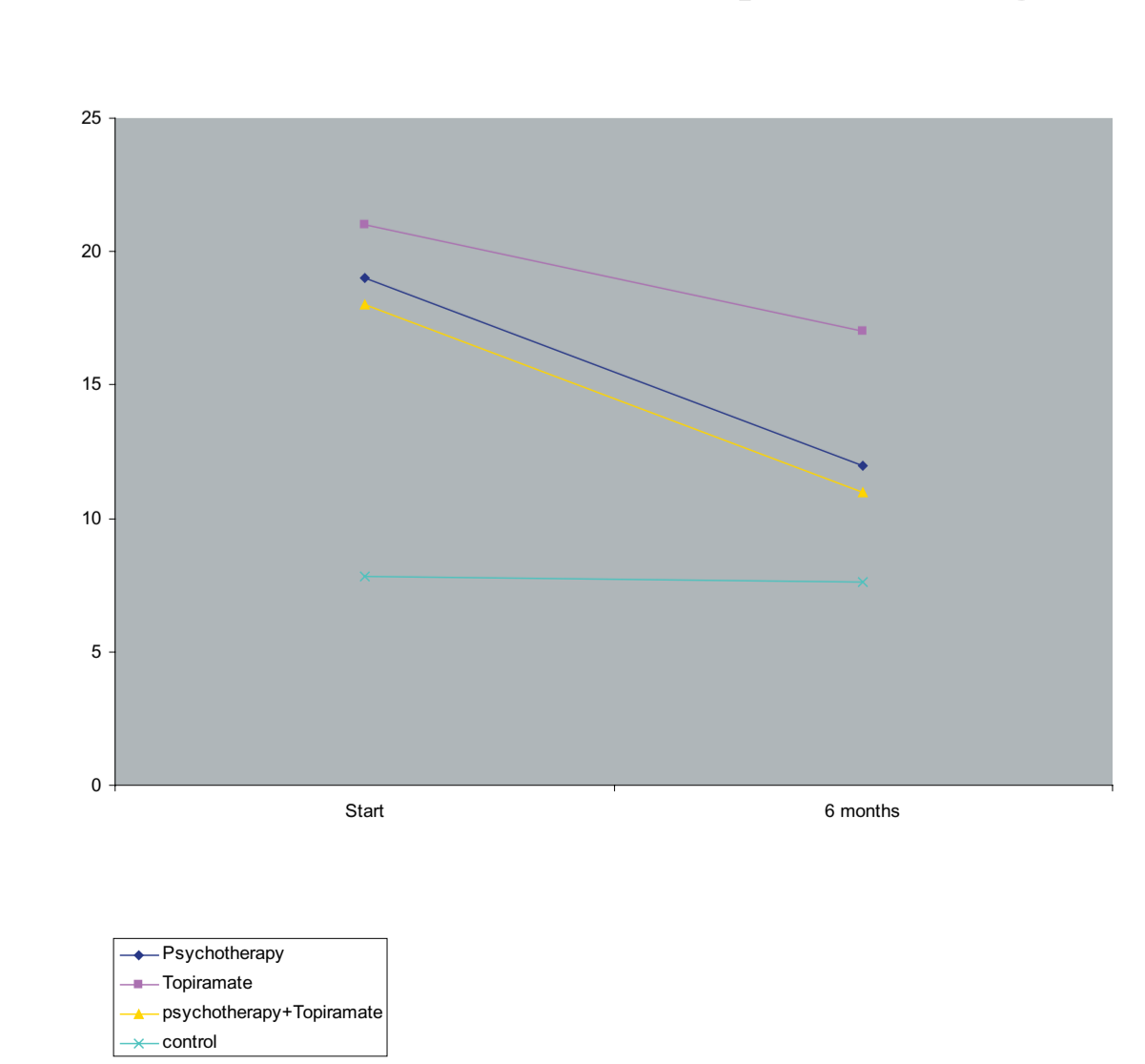
- The group which received psychotherapy plus Topiramate pharmacological treatment experienced the most significant improvement

### Results 5 Motor Impulsivity



- The group of psychotherapy plus Topiramate showed the most improvement on the motora impulsivity scale

### Results 6 Non Planned Impulsivity



- The group of psychotherapy plus Topiramate showed the most improvement