

HYPOTHETICAL: =I Am Invincible (AUS) -- =Special Mention (AUS)

Based on the cross of I Am Invincible (AUS)/Danzig and his sons and grandsons

A++

				D	Northern Dancer, 61 b
				Danzig, 77 b	Pas de Nom, 68 dk b/
			Green Desert, 83 b	70 h	Sir Ivor, 65 b
		1		Foreign Courier, 79 b	Courtly Dee, 68 dk b/
		=Invincible Spirit (IRE), 97 b		W. (OR) 20 J	Sharpen Up (GB), 69 ch
				=Kris (GB), 76 ch	Doubly Sure (GB), 71 b
			Rafha (GB), 87 b		Artaius, 74 b
				=Eljazzi, 81 b	=Border Bounty (GB), 65 b
	=I Am Invincible (AUS), 04				=Biscay (AUS), 65 ch
				=Bletchingly (AUS), 70 br	=Coogee (GB), 59 b
			=Canny Lad (AUS), 87 br	11 2010 75	=Lunchtime (GB), 70 ch
		=Cannarelle (AUS), 98 b		=Jesmond Lass (AUS), 75 ch	=Beautiful Dreamer (AUS), 67 gr
					Our Native, 70 b
			=Countess Pedrille (AUS), 94 b	Zoffany, 80 b	Grey Dawn Girl, 70 gr
				01.4	=Cardinal (NZ), 69 ch
Hypothetical Foal				=Sister Pedrille (AUS), 80 ch	=Royal Law (AUS), 75 ch
		=Exceed And Excel (AUS), 00 b			Northern Dancer, 61 b
				Danzig, 77 b	Pas de Nom, 68 dk b/
			Danehill, 86 b		His Majesty, 68 b
				Razyana, 81 b	Spring Adieu, 74 b
					Northern Dancer, 61 b
				Lomond, 80 b	My Charmer, 69 b
			Patrona, 94 ch		Watch Your Step, 56 ch
				Gladiolus, 74 ch	Back Britches, 64 ch
	=Special Mention (AUS), 05 ch			=Huntingdale (IRE), 83 ch	=Double Form (IRE), 75 ch
			=Gold Brose (AUS), 90 ch		=Abbeydale, 76 ch
					Yeats, 76 b
		=Thong Special (AUS), 00		=Cryptic Verse (AUS), 82 b	Under Cover, 65 ch
		b			Lyphard, 69 b
				Alzao, 80 b	*Lady Rebecca, 71 b
			=Special Sal (AUS), 91 b		=Habituate (IRE), 76 b
				=Special (AUS), 83 b	=Sal (IRE), 74 ch

Pedigree	Statistics
Coefficient of Relatedness: 2.44%	Pedigree Completeness: 100.00%
Inbreeding Coefficient: 1.91%	Unique Ancestors: 371/510

Dosage II	nformation						
Dosage Profile: 0 2 2 0 0							
Dosage Index: 3.00	Center of Distribution: +0.50						

Notes on terminology in this report: Coefficient of Relatedness measures the degree of relatedness between sire and dam to six generations; Inbreeding Coefficient measures the mating's degree of inbreeding to eight generations; Pedigree Completeness is the portion of the pedigree that is on file to eight generations; Unique Ancestors is the number of unique names found to eight generations; Dosage Information: visit www.chef-de-race.com/dosage.htm Direct Cross refers to the exact sire over exact broodmare sire; Rated Cross is the cross used to base the TrueNicks rating and may differ from the direct cross to maintain statistical significance; AEI: Average Earnings Index; AWD: Average Winning Distance (in furlongs). All currency figures are converted to U.S. dollars at the time of race or sale.

Pedigree and racing information provided by:





HYPOTHETICAL: =I Am Invincible (AUS) -- =Special Mention (AUS) Based on the cross of I Am Invincible (AUS)/Danzig and his sons and grandsons Variant = 9.05

Starters Considered in Rated Cross	
Direct Sire/ Broodmare Sire Cross	1
Additional Starters on Rated Cross	18
Total Starters	19

Auction Results - All Foals on Direct Sire/Broodmare Sire Cross								
Туре	#Sold	Avg	Med					
Weanlings		**	-					
Yearlings	2	\$162,531	\$162,531					
2YOs	***	766	-					

Surface Performance for Rated Cross							
Type	Dirt	Turf	AW				
Starters	-	19	-				
Winners	-	11	w-				
SW	-	3	-				

Sire						
Sire Name	=I Am Invincible (AUS)					
Sire AEI	1.79					
Progeny AWD	5.48 f					
Chief Earner	Brazen Beau (AUS) (\$638,127)					

Broodmare Sire							
Broodmare Sire Name	=Exceed And Excel (AUS)						
Broodmare Sire AEI	1.25						
Progeny AWD as BM Sire	5.61 f						
Chief Earner	Bounding (AUS) (\$494,346)						

All Foa	ils Bred on Rated		By Sire Line with Other Mares	Out of BM Sire Line with Other Sires		
	All Foals	Colts	Fillies	All Foals	All Foals	
Foals of Racing Age	58	30	28	138	32,957	
Starters (% Foals of Racing Age)	19 (33%)	9 (30%)	10 (36%)	56 (41%)	19,087 (58%)	
Winners (% Starters)	11 (58%)	7 (78%)	4 (40%)	36 (64%)	11,294 (59%)	
SW (% Starters)	3 (16%)	3 (33%)	36	2 (4%)	749 (4%)	
Earnings	\$1,023,855	\$833,485	\$190,370	\$1,489,602	\$911,341,832	
Avg Distance Raced	5.66 f	5.85 f	5.46 f	5.62 f	7.46 f	
Avg Winning Distance	5.50 f	5.54 f	5.34 f	5.48 f	7.39 f	

	Тор	15 Foals	Bred on Rated Cross	
Name	Sex	Foaled	Sire/Broodmare Sire	Best Race
BRAZEN BEAU (AUS)	Colt	2011	I Am Invincible (AUS)/Snaadee	G1SW
VINNIE EAGLE (AUS)	Gelding	2011	I Am Invincible (AUS)/Danehill Dancer (IRE)	G3SW
BASSILLIQUE (AUS)	Gelding	2011	I Am Invincible (AUS)/Langfuhr	SW
Tetsuko (AUS)	Filly	2011	I Am Invincible (AUS)/Snaadee	G2SP
Uratta Belle (AUS)	Filly	2011	I Am Invincible (AUS)/Commands (AUS)	SP
Va Va Veni (AUS)	Gelding	2011	I Am Invincible (AUS)/Grand Lodge	Wnr
Me Mongo (AUS)	Gelding	2011	I Am Invincible (AUS)/Cape Cross (IRE)	Wnr
Tudor Bolt (AUS)	Gelding	2011	I Am Invincible (AUS)/Polish Patriot	Wnr
Operose (AUS)	Filly	2011	I Am Invincible (AUS)/Rock of Gibraltar (IRE)	Wnr
Murranji (AUS)	Gelding	2011	I Am Invincible (AUS)/Danehill	Wnr
Ramlah (AUS)	Filly	2012	I Am Invincible (AUS)/Desert Style (IRE)	Wnr
Invienna (AUS)	Filly	2011	I Am Invincible (AUS)/Danehill	PI
Fly Buy Fly (AUS)	Filly	2011	I Am Invincible (AUS)/Perugino	Pl
Lanikai (AUS)	Filly	2011	I Am Invincible (AUS)/Flying Spur (AUS)	PI
I Am Relentless (AUS)	Gelding	2012	I Am Invincible (AUS)/Agnes World	Rnr

Pedigree and racing information provided by:





Stakes Winners

Stakes winners bred from the INVINCIBLE SPIRIT--DANEHILL cross

Stakes Winner	Yob	Sex	Best	Dirt AWS	Turf	Pedigree
FONTANELICE	2012	F	G3		Υ	VALE OF YORK ex CHOOSE ME PLEASE (CHOISIR)
MUTHMIR	2010	С			Υ	INVINCIBLE SPIRIT ex FAIRY OF THE NIGHT (DANEHILL)
VINNIE EAGLE	2011	G	G3		Υ	I AM INVINCIBLE ex SWEET MAGGIE (DANEHILL DANCER)



Stakes Winners

Stakes winners bred from the I AM INVINCIBLE--DANZIG cross

Stakes Winner	Yob	Sex	Best	Dirt	AWS	Turf	Pedigree
BASSILLIQUE	2011	С				Υ	I AM INVINCIBLE ex SACRED HILL (LANGFUHR)
BRAZEN BEAU	2011	С	G1	Υ		Υ	I AM INVINCIBLE ex SANSADEE (SNAADEE)
VINNIE EAGLE	2011	G	G3			Υ	I AM INVINCIBLE ex SWEET MAGGIE (DANEHILL DANCER)



Stakes Winners

Stakes winners bred from the INVINCIBLE SPIRIT--DANZIG cross

Stakes Winner	Yob	Sex	Best	Dirt	AWS	Turf	Pedigree
BASSILLIQUE	2011	С				Υ	I AM INVINCIBLE ex SACRED HILL (LANGFUHR)
BRAZEN BEAU	2011	С	G1	Υ		Υ	I AM INVINCIBLE ex SANSADEE (SNAADEE)
CAPTAIN COURAGEOUS	2010	С				Υ	CAPTAIN MARVELOUS ex VADE RETRO (DESERT SUN)
FONTANELICE	2012	F	G3			Υ	VALE OF YORK ex CHOOSE ME PLEASE (CHOISIR)
MUTHMIR	2010	С				Υ	INVINCIBLE SPIRIT ex FAIRY OF THE NIGHT (DANEHILL)
VINNIE EAGLE	2011	G	G3			Υ	I AM INVINCIBLE ex SWEET MAGGIE (DANEHILL DANCER)

PEDIGREE RATING SCORES - "NICKS"

It's a simple formula – It's all about risk reduction.

Nicks have become an integral part of the decision-making process in the mating and purchasing of thoroughbreds. Most breeders recognise that an affinity or compatibility can exist between two thoroughbred sire lines, such that, when crossed, those lines yielded a greater proportion of superior runners than when either one of them are crossed with any other sire lines. Great breeders, from Federico Tesio to present-day breeders around the world have relied on observed nicks to help guide their breeding plans and buying decisions.

Over 70% of ALL Stakes Winners are "A" Rated Nicks

In order to identify nicks in a systematic way, the software database we use developed an evaluation method based on sire-line analysis. Ongoing studies by researchers show that approximately 25% of the Thoroughbred population is the product of highly successful nicks ("A" rated nicks) while over 70% of stakes winners come from these "A" rated nicks!

Statistics:

There are approximately 20,000 live foals born each year – 25% (5,000) are A Rated whilst 75% (15,000) are rated below. There are 541 Stakes Races in Australia this racing season. 70% (379) will be won from the 5,000 A rated foals born (7.6%) 30% (162) will be won from the 15,000 foals in the lower rated group (1.08%).

For a practical businessperson seeking a return on money invested, it makes no sense to ignore statistically unfavorable odds. Buying a superior racehorse is already a difficult enough proposition. The Rating systems we use allow us to see into the future by looking into the past and thereby to avoid those mating patterns that have failed. The Nick Rating enables us to avoid crosses that have had little or no success in the past. At the same time, it enables us to identify and thus duplicate successful sire-line crosses, dramatically increasing the chances of success.

Over the years evaluating Nicks have proven to be an invaluable tool in the stallion selection process when identifying yearlings for purchase. Dean Watt, Managing Director of Dynamic Syndications has enjoyed great success as a result of utilising such information. For example:

SAVABEEL, POLAR SUCCESS, HE'S NO PIE EATER, ATOMIC FORCE, ECONSUL, DE BEERS, BRADBURY'S LUCK, TENANT'S TIARA and REWARD FOR EFFORT were all superior racehorses who had superior pedigree ratings.

ECONSUL	A ++	13,862%
SAVABEEL	A ++	9,325%
DEBEERS	A ++	4,270%
POLAR SUCCESS	A ++	2,240%
REWARD FOR EFFORT	\mathbf{A} +	1,175%
ATOMIC FORCE	\mathbf{A} +	988%
BRADBURY'S LUCK	\mathbf{A}	485%
TENANT'S TIARA	\mathbf{A}	238%
HE'S NO PIE EATER	A	161%

Further afield, in 2008 the Top 5 Racehorses in the world had the following ratings:

1 CURLIN	\mathbf{A} +	1,375%
2 NEW APPROACH	\mathbf{A} +	1,472%
3 RAVEN'S PASS	A ++	5,961%
4 DUKE OF MARMALADE	\mathbf{A}	409%
5 HENRYTHENAVIGATOR	A ++	1,531%

Then to further support the theories, in 2008 there was 67 Group 1 races run in Australia. These races were won by 48 individual horses. When these 48 individuals' pedigrees were analysed it showed:

35 / 48 Rated A or above = 73% of Individual Group 1 Winners Rates A or above

Affinity between sire lines was long ago observed by the world's best thoroughbred breeders. Today through modern technologies we are able to quantify what was once only a subjective judgment based on the observations of a relatively small equine population.

Ratings are essentially the objective measurement of success, or lack therefore, of sireline crosses. Success is quantified by being the winners of stakes races with a prizemoney of at least \$50,000. Through software databases, containing the pedigrees of all such winners since 1977 (over 30,000 winners), we are able to more easily identify what sireline crosses have succeeded in producing stakes winners and compare those numbers with the stakes winning population on the whole.

Often a sire line may appear to be successful with a particular broodmare sire line. However, if the level of success is no better than that sire line's success with the entire population, then there is not a true nick.

In order to understand the ratings for easy use, a letter-grade scale was developed. As in the scholastic setting, the scales ranges from F (Fail) through to A with A+ also A++ and now since 2011 the software system now identifies A+++ as possible to be achieved in some select instances. The Variants (percentages) shown in the table below are the deviation from the norm that has been observed by that sire line cross in question. On this

scale -15% to +15% (C) is considered average, meaning that the sire-line cross has yielded results that are statistically no better and no worse than what would be expected with the entire population.

An "A" rated nick indicates that a far greater percentage of stakes winners have resulted from that cross than expected. An "F" rated nick indicates that the number of stakes winners resulting from a cross is at least 50% below expectations. This does not mean that there cannot be success or will not be success from such a mating in the future. It does mean that in all the experience of the last 20 + years of winners of stakes races, that type of mating has had a significant lack of success as measured by stakes winner production.

It must be stressed that a below "Average" rating does not guarantee or even predict failure. It means only that, to date, the particular sire-line cross has fallen at least 16% short of what would be expected. Nicks can and do change over time.

Consequently, an above Average Rating must be kept in proper perspective as there are other factors that must be considered when selecting a horse for purchase. Specifically, conformation evaluation is critical. A thoroughbred may have a brilliant pedigree on paper that rates as either Excellent, Superior, Superb or Outstanding on our Ratings Score however if the skeletal structure and/or the overall constitution of the individual is lacking then the horse is rejected as a candidate for purchase.

The Rating Scale is shown below:

Nick	Horse	Variant %
A+++	Excellent	+20,000 and above
A++	Superior	+1,501 to + 19,999
A+	Superb	+500 to +1,500
A	Outstanding	+150 to +499
B+	Very Good	+100 to +149
В	Good	+50 to +99
C+	Acceptable	+16 to +49
C	Average	-15 to +15
D+	Weak	-16 to -34
D	Poor	-35 to -49
F	Unsuccessful	-50
0 SW	Zero Stakes Winners	0 SW

Dynamic Syndications uses these rating tools along with additional pedigree analysis systems from other software databases which skewer the data to local environmental factors and we have introduced a ranking on the class of Stakes Races which are won to establish what we consider is an inherent opportunity of greater racetrack success. Often a horse can have a very high Nick rating and yet score lowly on the variant and visa versa. We use this information to assist us in pedigree selections after the physical inspections have also been considered. Also we cannot blindly accept a rating score. For example Australia has only 2.9% of our races listed as Stakes Races whilst New Zealand has 9.7% and Ireland has 13.1%. Obviously the data will be weighted in certain directions if we did not counter this information with a ranking on the Stakes Races based upon country and class of race, racing region within the country and climatic conditions in the region. After adjustments the rating scale is presented below.

Quality Rating Summary

It is undeniable that racing class is in great part a function of the *quality* of ancestors contributing to new individual. It follows that certain quality stallions tend to contribute more favorably than other sires. When Quality points contributed by such deserving sires are combined with dosage points, the total points more accurately reflect the overall class of a pedigree.

The *Quality sires* in a pedigree contribute quality points (QP) to the new individual in exactly the same way as ancestral sires contribute dosage points (DP). The total number of *Quality points* is added to the *Dosage points* to get *Total Points* (TP).

The Quality Rating, which ranges from zero, as the low, to ten, as the high, is scaled to the number of total points in the pedigree:

Total Points	Quality Rating
0	Q0
1 to 4	Q1
5 to 9	Q2
10 to 14	Q3
15 to 19	Q4
20 to 24	Q5
25 to 29	Q6
30 to 39	Q7
40 to 44	Q8
45 to 54	Q 9
55 +	Q10