GeoNicks[™] Australasia

I AM INVINCIBLE--MEFNOODA

Α

(194%)

Based on the I AM INVINCIBLE--SADLER'S WELLS cross

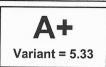
This cross has produced 3 stakes winners in Australasia, including:

Stakes Winner	Yob	Sex	Best	Dirt AWSTurf	Pedigree
INVINCIBELLA	2013	F	G1	Y	I AM INVINCIBLE ex ABSCOND (GALILEO)
MEDIA SENSATION	2015	F	G1	Y	I AM INVINCIBLE ex DIFFERENT TO (HIGH CHAPARRAL)
MISS LEONIDAS	2014	F	G2	Y	I AM INVINCIBLE ex HAPPY PLAY (BARATHEA)





HYPOTHETICAL: =I Am Invincible (AUS) -- =Mefnooda (AUS) Based on the cross of I Am Invincible (AUS)/Sadler's Wells and his sons and grandsons



				Danzig, 77 b	Northern Dancer, 61 b
			Green Desert, 83 b	Danzig, 77 D	Pas de Nom, 68 dk b/
			Green Desert, 63 D	Foreign Courier, 79 b	Sir Ivor, 65 b
		=Invincible Spirit (IRE), 97		r oreign courier, 79 b	Courtly Dee, 68 dk b/
		b		=Kris (GB), 76 ch	Sharpen Up (GB), 69 ch
			Rafha (GB), 87 b		Doubly Sure (GB), 71 b
				=Eljazzi, 81 b	Artaius, 74 b
	=I Am Invincible (AUS), 04				=Border Bounty (GB), 65 b
	b			=Bletchingly (AUS), 70 br	=Biscay (AUS), 65 ch
			Connyl od (ALIS) 97 br	-Bietchingly (AUS), 70 pr	=Coogee (GB), 59 b
			=Canny Lad (AUS), 87 br	= loomond loop (ALLO) 75	=Lunchtime (GB), 70 ch
		=Cannarelle (AUS), 98 b		=Jesmond Lass (AUS), 75 ch	=Beautiful Dreamer (AUS), 67 gr
Hypothetical Foal				Zoffany, 80 b	Our Native, 70 b
			-Countoos Dadvilla (ALIC)	Zollany, ou b	Grey Dawn Girl, 70 gr
			=Countess Pedrille (AUS), 94 b	=Sister Pedrille (AUS), 80	=Cardinal (NZ), 69 ch
				ch	=Royal Law (AUS), 75 ch
					Northern Dancer, 61 b
				Sadler's Wells, 81 b	Fairy Bridge, 75 b
			El Prado (IRE), 89 gr	Lady Canulat 74 m	Sir Ivor, 65 b
		Medaglia d'Oro, 99 dk b/		Lady Capulet, 74 ro	Cap and Bells, 58 gr
		Wedagila d Olo, 35 dk b/		Polliumpor 74 h	Damascus, 64 b
			Connucine Day 00 h	Bailjumper, 74 b	Court Circuit, 64 b
			Cappucino Bay, 89 b	Dubbed In, 73 ch	Silent Screen, 67 ch
	=Mefnooda (AUS), 11 b			Dubbed III, 73 Ch	Society Singer, 68 ch
				Danzig, 77 b	Northern Dancer, 61 b
			Danehill, 86 b	Ballizig, 77 b	Pas de Nom, 68 dk b/
			Danonin, 00 D	Razyana, 81 b	His Majesty, 68 b
		One World (AUS), 01 b		Tazyana, or o	Spring Adieu, 74 b
				Artichoke, 81 b	Jacinto, 62 br
			Prawn Cocktail, 92 b		Ivory Tower, 60 b
			Trawit GOCKLAII, 92 D	Crimson Saint, 69 ch	Crimson Satan, 59 ch
				Simon Saint, 69 Ch	Bolero Rose, 58 ch

Pedigree	Statistics	Dosage Information			
Coefficient of Relatedness: 3.26%	Pedigree Completeness: 100.00%	Dosage Profile: 2 4 3 1 0			
Inbreeding Coefficient: 2.11%	Unique Ancestors: 944/2046	Dosage Index: 3.00	Center of Distribution: +0.70		

Notes on terminology in this report: **Coefficient of Relatedness** measures the degree of relatedness between sire and dam to ten generations; **Inbreeding Coefficient** measures the mating's degree of inbreeding to ten generations using Wrights F; **Pedigree Completeness** is the portion of the pedigree that is on file to ten generations; **Unique Ancestors** is the number of unique names in the pedigree through to ten 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:

equineline.com

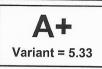
Copyright © 2020 The Jockey Club Information Systems, Inc.

Page 1 of 2



HYPOTHETICAL: =I Am Invincible (AUS) -- =Mefnooda (AUS)

Based on the cross of I Am Invincible (AUS)/Sadler's Wells and his sons and grandsons



Starters Considered in Rated Cross				odmare Sir		Surface Performance for Rated Cross			
Direct Sire/ Broodmare Sire Cross	-	Туре	#Sold	Avg	Med	Туре	Dirt	Turf	AW
		Weanlings	-	-	-	Starters	-	22	5
Additional Starters on Rated Cross	22	Yearlings	-	_	-	Winners		18	2
Total Starters	22	2YOs	-	-	-	SW	-	3	-

	Sire	Broodmare Sire			
Sire Name	=I Am Invincible (AUS)	Broodmare Sire Name	Medaglia d'Oro		
Sire AEI	1.94	Broodmare Sire AEI	1.16		
Progeny AWD	5.84 f	Progeny AWD as BM Sire	6.89 f		
Chief Earner	Invincibella (AUS) (\$2,245,291)	Chief Earner	Rock Fall (\$749,180)		

All Foa	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	31	14	17	873	26,230
Starters (% Foals of Racing Age)	22 (71%)	7 (50%)	15 (88%)	608 (70%)	16,857 (64%)
Winners (% Starters)	19 (86%)	7 (100%)	12 (80%)	456 (75%)	10,188 (60%)
SW (% Starters)	3 (14%)	-	3 (20%)	48 (8%)	904 (5%)
Earnings	\$5,099,684	\$1,755,425	\$3,344,259	\$53,352,268	\$1,007,754,043
Avg Distance Raced	6.29 f	6.11 f	6.39 f	5.94 f	8.75 f
Avg Winning Distance	6.15 f	5.93 f	6.26 f	5.83 f	8.79 f

Top 15 Foals Bred on Rated Cross							
Name	Sex	Foaled	Sire/Broodmare Sire	Best Race			
INVINCIBELLA (AUS)	Mare	2013	I Am Invincible (AUS)/Galileo (IRE)	G1SW			
MEDIA SENSATION (AUS)	Mare	2015	I Am Invincible (AUS)/High Chaparral (IRE)	G1SW			
MISS LEONIDAS (AUS)	Mare	2014	I Am Invincible (AUS)/Barathea (IRE)	G2SW			
Katsuro (AUS)	Gelding	2013	I Am Invincible (AUS)/Barathea (IRE)	G2SP			
Invincible Gold (AUS)	Gelding	2011	I Am Invincible (AUS)/Barathea (IRE)	Wnr			
Seles (AUS)	Mare	2015	I Am Invincible (AUS)/Galileo (IRE)	Wnr			
Ducale (AUS)	Mare	2015	I Am Invincible (AUS)/Galileo (IRE)	Wnr			
Venture Capital (AUS)	Mare	2014	I Am Invincible (AUS)/King of Kings (IRE)	Wnr			
Asateer (AUS)	Colt	2016	I Am Invincible (AUS)/High Chaparral (IRE)	Wnr			
Cardinet (AUS)	Mare	2015	I Am Invincible (AUS)/Tobougg (IRE)	Wnr			
<u>Dizzy Miss Lizzy (AUS)</u>	Mare	2015	I Am Invincible (AUS)/Scenic (IRE)	Wnr			
Kamien (AUS)	Gelding	2015	I Am Invincible (AUS)/Galileo (IRE)	Wnr			
<u> Dur Regal Spirit (AUS)</u>	Mare	2015	I Am Invincible (AUS)/Sadler's Wells	Wnr			
nvincible Queen (AUS)	Mare	2014	I Am Invincible (AUS)/King of Kings (IRE)	Wnr			
<u>_ord Varys (AUS)</u>	Gelding	2015	I Am Invincible (AUS)/Refuse To Bend (IRE)	Wnr			

Pedigree and racing information provided by:

equineline.com

Copyright © 2020 The Jockey Club Information Systems, Inc.

Page 2 of 2



Stakes Winners

Stakes winners bred from the I AM INVINCIBLE--SADLER'S WELLS cross

Stakes Winner	Yob	Sex	Best	Dirt	AWS	Turf	Pedigree
INVINCIBELLA	2013	F	G1			Y	I AM INVINCIBLE ex ABSCOND (GALILEO)
MEDIA SENSATION	2015	F	G1			Y	I AM INVINCIBLE ex DIFFERENT TO (HIGH CHAPARRAL)
MISS LEONIDAS	2014	F	G2			Y	I AM INVINCIBLE ex HAPPY PLAY (BARATHEA)



Stakes Winners

Stakes winners bred from the INVINCIBLE SPIRIT--SADLER'S WELLS cross

Stakes Winner	Yob	Sex	Best	Dirt	AWS	Turf	Pedigree
ADELINDA	2017	F				Y	ZEBEDEE ex FEELS SO CLOSE (HIGH CHAPARRAL)
AFANDEM	2014	С	G3			Y	VALE OF YORK ex AL MAHMEYAH (TEOFILO)
ALEA IACTA	2012	F	G3			Y	INVINCIBLE SPIRIT ex ALMIRANTA (GALILEO)
ALOE VERA	2016	F				Y	INVINCIBLE SPIRIT ex ALMIRANTA (GALILEO)
ANAM ALLTA	2008	F	G3			Y	INVINCIBLE SPIRIT ex KILTUBBER (SADLER'S WELLS)
ANCIENT SPIRIT	2015	С	G2			Y	INVINCIBLE SPIRIT ex ASSISI (GALILEO)
APACHE SPIRIT	2011	С				Y	INVINCIBLE SPIRIT ex AGATHE RARE (SADLER'S WELLS)
BABY PINK	2015	F				Y	INVINCIBLE SPIRIT ex DRESS REHEARSAL (GALILEO)
BAHAMA MAMA	2004	F				Y	INVINCIBLE SPIRIT ex NASSMA (SADLER'S WELLS)
BARBILL	2016	С				Y	ZEBEDEE ex FIUISE (MONTJEU)
BEACH BELLE	2012	F				Y	INVINCIBLE SPIRIT ex BEACH BUNNY (HIGH CHAPARRAL)
BOOMER	2017	F	G3			Y	KINGMAN ex WALL OF SOUND (SINGSPIEL)
CHARLINE ROYALE	2015	F	G3			Y	ZEBEDEE ex ROYAL MAJESTIC (TOBOUGG)
CHARM SPIRIT	2011	С	G1			Y	INVINCIBLE SPIRIT ex L'ENJOLEUSE (MONTJEU)
DOUBLE DREAM	2013	F				Y	LAWMAN ex HIGH LIMITS (HIGH CHAPARRAL)
EMMAUS	2014	С				Y	INVINCIBLE SPIRIT ex PRIMA LUCE (GALILEO)
EXTREMIS	2012	С				Υ	INVINCIBLE SPIRIT ex FIDELITE (IN THE WINGS)
FOX CHAIRMAN	2016	С				Υ	KINGMAN ex STARFISH (GALILEO)
INVINCIBELLA	2013	F	G1			Υ	I AM INVINCIBLE ex ABSCOND (GALILEO)
LADY WINGSHOT	2009	F	G3			Υ	LAWMAN ex NASSMA (SADLER'S WELLS)
LAGUNA SALADA	2006	F				Υ	INVINCIBLE SPIRIT ex FLYING FLAG (ENTREPRENEUR)
LIBRAN	2011	С	G2			Υ	LAWMAN ex TRUE CRYSTAL (SADLER'S WELLS)
MAGNA GRECIA	2016	С	G1			Υ	INVINCIBLE SPIRIT ex CABARET (GALILEO)
MEDIA SENSATION	2015	F	G1			Υ	I AM INVINCIBLE ex DIFFERENT TO (HIGH CHAPARRAL)
MISS LEONIDAS	2014	F	G2			Υ	I AM INVINCIBLE ex HAPPY PLAY (BARATHEA)
MONICA SHERIFF	2016	F	G3			Υ	LAWMAN ex REQUIRE (MONTJEU)
NAUSHA	2016	F	G3			Υ	KINGMAN ex NAZYM (GALILEO)
PIMPERNEL	2009	F				Y	INVINCIBLE SPIRIT ex ANNA PALLIDA (SADLER'S WELLS)
ROCQUES	2016	F	G3			Y	LAWMAN ex REGINA MUNDI (MONTJEU)
SHE SPIRIT DI SU	2009	F				Y	INVINCIBLE SPIRIT ex SHE BAT (BATSHOOF)
STAYING ON	2005	G				Y	INVINCIBLE SPIRIT ex LAKATOI (SADDLERS' HALL)

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	A+	1,175%
ATOMIC FORCE	\mathbf{A} +	988%
BRADBURY'S LUCK	Α	485%
TENANT'S TIARA	Α	238%
HE'S NO PIE EATER	Α	161%

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

1 CURLIN	A+	1,375%
2 NEW APPROACH	A+	1,472%
3 RAVEN'S PASS	A+ +	5,961%
4 DUKE OF MARMALADE	Α	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.

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

The Rating Scale is shown below:

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	Q9
55 +	Q10