...rad a as a de e de fac ass ca ed c- s e 3 ss (Da a B, e a, ib s ed da a, 2016); e a ibs ss d s .

I c cis , e ec a ass f c da e a ab MLPA MSA f c e f PBR ds is es be ee ds 3 a d s 3 s a d dces esi s a ae ed c e f eas ass-f ee si a .

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F a ca Dsc si s: T ea s a e ...e ea c ec a e es a ae as dsassed s a ce.

A i C b s:
C ce a dde s : Hssa , Ka a, C i ad, He a , Da a
A a ss ad e ea : Hssa , Ka a, C i ad, He a , Da a
Da a c ec : Hssa , Ka a, G ee a , Kac e e, E , C i ad, He a , Da a
Oba ed fi d : N a cab e
O ea es sb : Hssa , Ka a, G ee a , Kac e e, E , C i ad, He a , Da a

C es de ce:
Sa a E. C i ad, MBBS, P D, De a e f Pa , M ec a ad C ca Ca ce Med c e, U es f L e , 3d F A e Bd , 6 Wes , L e L78TX, UK. E- a : s.e.c i ad@ e .ac .

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Adjuvant Dendritic Cell Vaccination in High-Risk Uveal Melanoma

U ea ea a (UM) s e s c ...a a a a ac ad s a a a cde ce f 4 10 e e e ...a . T e 5-ea ea si a (OS) ae s a ae 70% 80%. U 50% f a e s UM de e ea as s, si a afe a ds ease-f ee e a (2–5 eas). If ea a c ds eases se e ss s ds a a 1-ea OS a e f 10% 40%. G e , effec es s e c ea e OS s a abe f a es ea ac UM, as a adi a ea es si a be ef .

O es ea c ad es a e ef ed se ea s ec- ede d ce (DC) acc a s des a es q a e s ea as e c ad s c ad c ca es s. De d ce s a ea e- ese ces e ie ca ac ac ae a ea e s ec fic T ces, a d is ae si abe d ce a ' ...es ses. T e a- es 100 a d s ase, ised DC acc a s des f- a es q a e s ea a, a eb e ssed a UM ' ce s ad is c s ' ea a ...ae a ef ' ...- ea UM. We ece s ed a DC acc a s feas be ea as a c UM, a d safe c ce s e e de ec ed. Fi e- e, DC acc a s ed e ea a e ace e s's a ' ' a d a be ass ca ed e a a e a e OS ea as a c UM.[1] De d ce acc a a a ea e ...ced effec e ad a se, bec ase ' ...- b de ea as a c a es a a e e d c f effec e ie es ses. P efe ab , a es a s f de e e f ea as a c ds ease a e s ee ed f ad a ea e. I a UM, s 3 c ea es s ...e de e e f ea as as a d dec ea ed si a (3- ea OS a e 60% s 3 s. 95%–100% ds 3) a d s de fied a ae 50% f a e s.[2]

T e ef e, e ef ed a e- abe ase IIs d -s a es UM s 3, es a ' ' c e- s ses af e- ad a DC acc a . I cis c e a ci ded ' a a c ea e (HLA)-A*02:01 s , e as ce ca ea e <12 s, a d a e 18 75 eas. Pa e s ds a ea as as e e ci ded. Pa e s ece ed a is, c e-de ed DC a s fec ed RNA e c d e- a es 100 a d s ase acc d a asc ed e f 3 b ee ade a a d a e is acc a s. I ea abse ce f ds ease eo e ce, a es ece ed a a ' f 2 a e a ce c ces a 6- ea s. E os C ...ea a a as ha ed, a d e f ed c se as ha ed f a a es (NCT00929019). Bec ase f acc a a es, a cased b e a f e , de a ea da ss, HLA es c , a d e ...ease fe e-c se ea e s e fe ea a ab f a e a f e ec s, e a as ed e a- e . S , 23 a es ece ed a ea 1 c ce f adi a DC acc a a d e ec s de ede a ab e; 18 a es c e d a 3 c ces f acc a s. Base ec a ac e s s a es Tab e 1 (a a ab e a .aa a .). De d ce acc a s e e e ea ed. S de effec s ass ca ed DC acc a e ase e fi- es s 91% f a es a de e ea a e s e f ec 87% f a e s. V co ed 1 a e. N ea e e ea ed ade 3 4 c as bse ed.

Figure 1. Survival in correlation with the presence of tumor antigen-speci c T cells after adjuvant dendritic cell (DC) vaccination. Kaplan–Meier curves of disease-free survival (DFS) (**A**) and overall survival (OS) (**B**) for patients with high-risk uveal melanoma (UM) who received adjuvant DC vaccination after treatment of the primary tumor according to the presence (Tc+; n = 17; *solid black line*) or absence (Tc−; n = 6; *dashed grey line*) of tumor antigen-speci c T cells in skin-test in ltrating lymphocytes. Survival was calculated from the treatment of the primary tumor. Statistical signi cance was determined by a log-rank test.

T es e ca ac f e a es s d e ea ea e es se acc a , DCs e e ded e e e c a , ac a e. A a es es ed ed a ce a es se e e e c a , d ca a e acc e d ced de es ses. P e s , es ed a e ese ce f s ec fic T ces q es fs es fi a c es s e c ea ed e c ca c e a es ea a c q a es ea a. T e-f e, s es e e f ed af e eac acc a c ce, a d e ese ce ad f c a f s ec fic T ces d ced b DC acc a e ea a ed. Ti s ec fic T ces es es e e ese 17 a e s (74%), de s a e effec e ess f se e f acc es. O e is fi d s a es ea a c UM s ed a e s ec fic c se a e, beca se 29% f a es ea a c UM s ed s ec fic CD8+ T ces af e DC acc a . E e f e a e e fis s es acc ed ffe ce e a s e a ab e. We bse eds a d ffe e ces e a es f a es q a es ea a e ea a ca d adi a se . T e ef e, e s s a DC acc a be e e ead i a se s fi e si ed b s d.

U A 2016, 9 a es (39%) a e f ee f ea a e a se a d 14 a e s (61%) de e ed ea a c ds ease af e DC acc a , f 12 a es a e d ed (52%). T e ed a ds ease-f ee si a (DFS) as 34.5 s (95% c fide ce e a , 27.2–41.8), a 3- ea DFS a e f 47%. T e ed a OS as 51.8 s (95% c fide ce e a , 42.1–62.7), a 3- ea OS a e f 79%. W e a es e e a a ed se a e , e bass f e ese ce abse ce f s ec fic T ces e s es, a es s ec fic T ces ad be e DFS a d OS. N a ed ffe ces e ese e e base e ca ac e s cs (Tab e 1, a a ab e a .aa i a .). I a es s ec fic T ces af e DC acc a , e ed a DFS as 51.9 es s 18.8 s a es e c d de ec s ec fic T ces ($P = 0.024$) (F 1A). Med a OS as 45.0 s a 3- ea OS a e f 60% f a es de ec-ab e s ec fic T ces a d 58.0 s a d 87% f a es s ec fic T ces e e f d ($P = 0.016$) (F 1B).

B a e es c s f c a es s fs a s d es s ca da a acc i e 3- ea OS a e f e DC- acc a ed a es (79%) c a ed e e ea e (~60% s UM).[2,4] I e , HLA-A*02:01 e e c d be ac f d fac , b c ea s a s a a ec f a es UM.[5] Of c se, a a d ed a s eeded de a defi e c cs e effec f DC acc a s a es UM, c s q e ed ese e e (NCT01983748).

Adi a ea e DC acc a s a es UM es e c a d c ea es fa ab e OS a es a de ec ab e a e s ec fic e se af e DC acc a . F e de ce f ec ca efficac f adi a DC acc a s d be ba ed f s ec e a d ed c ca as.

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F a ca Dsc si e(s): T e a [illegible] (s) a e [illegible] ea [illegible] c - e c a e es a ae as ds u ssed s a ce.
J.M.dV.: G a [illegible] – Ne e a ds O a sa f Sc e fic Res ea c (NWO)-V c (918.14.655). T es s [illegible] fi d a ad [illegible] e e des c d c f s ea c .
S [illegible] ed b a s f e D c Ca ce S c e (KUN2010-4722, KUN2009-4402), T e Ne e a ds O a a f Sc e fic Res ea c (95100106), e N ee s Offe s ef Te e Ka e, e C b ed O a c Res ea c R e da F d a , a d e S c We e sc a e O de e e O ee s.
C.G.F.: Rece ed e NWO S aa a d a d a B ea Res ea c C c Ad a ced a (ERC-2010-AdG-269019-PATHFINDER).
T. dB., G.S., a d H.W.M. c b ed e a .

A C b s:
C ce a d des : B , Sc e be , Me s , de K e , P , F d , Pa dae s, de V es
Da a c ec : B , a de B sc , Sc e be , Me s , Ka e , K e, Ja , Ga , We d , B de s, C c e , a R ss , de G ede, Na s, a de G aaf, Ge se , de K e , P , F d , C e , Pa dae s, de V es
A a ss a d ea ea : B , a de B sc , Sc e be , Me s , de K e , P , F d , Pa dae s, de V es
Ob a ed fi d : N a cab e
O ea es s b : B , a de B sc , Sc e be , Me s , de K e , P , F d , Pa dae s, de V es

C es de ce:
I. J a da M. de V es, P D, De a e f Ti I , Radb d I s ef M ec a L fe Sc e ces, PO B 9101, 6500 HB N e e , T e Ne e a ds. E- a : J a da.deV es@adb d c. .

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